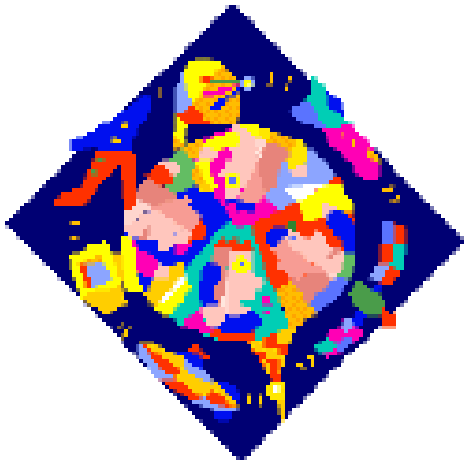
Building Information Age Communities



Community Information Technology Planning
Workbook

Cooperatively developed by
the Nebraska Information Technology Commission
and the University of Nebraska's Technologies Across Nebraska Initiative

The Building Information Age Communities: Community Information Technology Planning Workbook was written by Anne Byers and has been cooperatively developed by the Community Council of the Nebraska Information Technology Commission and the University of Nebraska's Technologies Across Nebraska initiative. The workbook and supplementary materials are available from the Community Information Technology Toolkit at www.nitc.state.ne.us/toolkit .

Nebraska Information Technology Commission
521 South 14th Street, Suite 200
Lincoln, Nebraska 68508-2707
phone (402) 471-3560
fax (402) 471-4608

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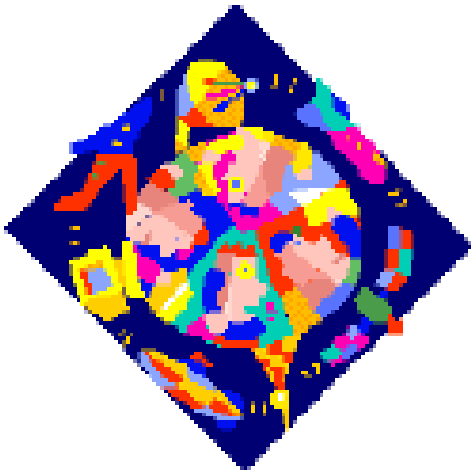

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Introduction

Information technology is transforming the economy and society, creating a completely new paradigm. Businesses are using telecommunications to speed up transactions, reduce costs, and expand their markets. Consumers are buying books, CDs, food, and clothing online. Families are exchanging photos via e-mail. Students at all levels are taking courses via distance learning technologies. And telemedicine is making mental health and other specialist services available in remote, underserved areas of the state.

In response to these changing conditions, communities are finding that economic and community development processes need to be retooled. Communities are finding that they need to become Information Age communities.

What is an Information Age community? Quite simply, Information Age communities utilize information technology to improve economic opportunities and quality of life.

Information Age communities have several characteristics:

Community Leadership and Support. The importance of community leadership cannot be understated. The most successful IT efforts in communities--both in Nebraska and across the U.S.--have been locally driven. In fact, whether or not a community has a core group of committed, well-connected individuals is the single most important predictor of its success. This core group often consists of representatives of key sectors and institutions in a community, including local government, economic and community development organizations, business, the library, education, and health care. IT professionals and industry representatives are also good resources. Effective community leaders build connections within the community, the state, and even throughout the country. Information Age development doesn't require community leaders who know all of the answers. It does, however, require community leaders who have the passion and commitment to find the answers.

Economic Development and E-Commerce. Information technology offers many opportunities for economic development. E-commerce make it possible for businesses to market their products and services worldwide. Information technology can also improve efficiency and reduce costs. Economic development efforts should include support and training for entrepreneurs and e-commerce training for existing businesses. Communities with a sound telecommunications infrastructure and a tech-savvy workforce may also be able to attract IT businesses. Ainsworth, Wausa and Bloomfield are examples of Nebraska communities in which call centers have located.

Telecommunications Infrastructure. Within the past couple of years, we have seen advances in the use of satellite, wireless, DSL, and cable technologies to provide broadband services. DSL and cable modems typically provide 1-2 megabits per second. Some experts predict that in 4 to 5 years, broadband with speeds of 25 to 40 megabits per second will be needed. Others predict that by 2010, one gigabit broadband (one billion bits) will be needed. The convergence of voice, video, and data will drive the demand for broadband.

Voice over IP (VoIP), the transmission of voice communications over the Internet, is an example of convergence and may be the killer application for broadband. Among the advantages of VoIP is the ability to choose a phone number from nearly any area code and to use that number anywhere. VoIP can also offer cost savings because VoIP services are not subject to many state and federal taxes.

WIFI is another emerging technology being used in communities, including Spokane, Washington; South Sioux City, Nebraska; and Carroll, Iowa. WIFI hot spots allow

business people to check their e-mail when they are out of the office. WIFI can also facilitate efficient city operations, allowing police officers, public works workers and other city employees to quickly access information. Some cell phones will now make VoIP calls when in a WIFI hot spot.

There are a number of strategies communities can employ to stimulate the deployment of advanced services and next -generation broadband. Aggregating local and/or regional demand has been used successfully in a number of communities, regions, and states across the United States. By aggregating public and private demand for telecommunications services, communities can prove to a provider that there is sufficient demand in a community to warrant infrastructure investments.

Another strategy that has been successfully employed is stimulating demand through education and training. Because most Nebraska businesses are in the early stages of adopting e-business practices, targeting training at local businesses may effectively stimulate the demand for broadband services.

Developing public-private partnerships is a third strategy. A public-private partnership may be as simple as hosting an open house for a wireless broadband Internet provider. Other communities have undertaken more bold efforts. Blacksburg, Virginia is perhaps the best example of a community that has undertaken bold public-private partnerships. Blacksburg, the most wired community in the United States, has made investments in duct, fiber, and collocation facilities which are leased to telecommunications providers.

Technology Literacy and Access. In order to prosper in the Information Age, communities need a technologically literate workforce. Low-cost or free training on the use of basic computer applications including using the Internet should be available in the community. Communities should also have computers with Internet access available for public use.

Advanced Technology Training. Information technology businesses need highly trained IT professionals. Communities in which advanced technology training is available are better able to address the shortage of IT workers faced by many businesses and also the continuing education needs of IT professionals.

Community Services and Information. Information technology can be used to more efficiently and cost-effectively distribute information, leading to greater civic involvement. Some services can also be provided via information technology. Many schools in Nebraska offer distance learning classes via interactive video. Patients in remote locations can also receive medical consultations from specialists via telemedicine. Areas in this section include public library services; education; health care; local government and community services; criminal justice, law enforcement, and emergency services; and non-profits, arts, culture, and history.

Social Capital. Social capital refers to the social networks that people can draw upon to solve common problems. Information technology can be used to inform and involve citizens, building social capital. Communities in which institutions and citizens work well together are more successful in their development efforts.

Quality of Life. Communities with a high quality of life are more successful in attracting and retaining IT workers and businesses. Nebraska communities have many things to offer: friendly, hard-working people; good schools; clean air; low crime rates; and little traffic congestion. However, there are other quality of life issues which may need to be addressed by a community in order to more effectively attract and retain IT professionals and businesses.

How to Use This Workbook

Suggested Planning Process: A Guide for the Chair or Facilitator

This section suggests a process which can be used to assess a community's e-readiness and to develop a community plan to use information technology to enhance development opportunities.

Benchmark Data

The data included in this section is provided to help communities understand how they compare to statewide and national benchmarks in several areas regarding the use of information technology.

5 Technology Trends for Communities

Is your community prepared for these five technology trends? E-commerce, e-government, and telehealth are changing the way businesses, governments, and health care providers operate. Voice over IP and WIFI hot spots are emerging technologies that are helping businesses and local governments operate more efficiently.

Is Your Community an Information Age Community?

This nine-question quiz is useful for beginning community discussions regarding information technology development. The quiz includes suggested strategies and activities for communities.

Community E-Readiness Assessment

This assessment tool is designed to help communities address their e-readiness in six e-readiness areas:

- Community Leadership and Support
- Telecommunications Infrastructure
- Technology Literacy and Access
- Advanced Technology Training
- Economic Development and E-Commerce
- Community Services and Information

In addition to the six e-readiness areas, the workbook also includes information on the importance of quality of life and social capital. The *Community E-Readiness Assessment* parallels the *Is Your Community an Information Age Community?* quiz, providing a tool for communities to examine each of these areas in more depth. The assessment takes an asset-based approach, asking communities to identify community strengths and available resources in each e-readiness area.

Worksheets

Worksheets for each stage in the planning process help keep community or regional technology committees on track and simplify the planning process. The E-Readiness Assessment Summary Worksheet allows committee members to review assessment information quickly. The Supplemental Assessment Activities Planning Worksheet helps committee members plan supplemental assessment activities such as conducting a community survey or an engineering study. The Building Community Support Planning Worksheet helps committee members develop a plan for building community support. The Technology Plan Planning Worksheet simplifies the process of compiling and synthesizing assessment information into a plan. Committees can use the Implementation Planning Worksheet to guide implementation of the community's technology plan.

Sample Plans

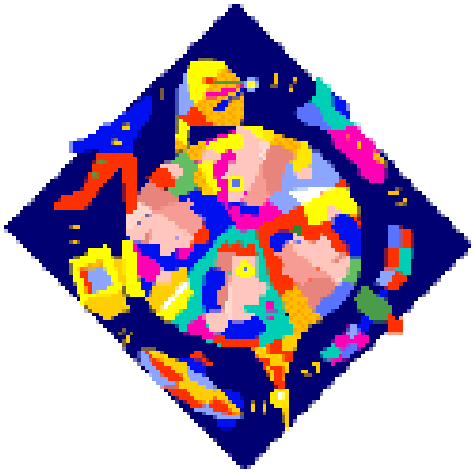
Two sample plans are provided. The first is a plan for a fictitious community. This plan addresses the most common areas of focus: community leadership; telecommunications infrastructure; technology literacy and access; and economic development and e-commerce. The second plan was developed by the KBR TechKnowledge Coalition, a group of community leaders from Keya Paha, Brown, and Rock Counties. The plan addresses technology development in three areas: telecommunications infrastructure; technology literacy and access; and economic development and e-commerce. Links to additional community technology plans are listed under Additional Resources.

Additional Resources

Supplementary workbook resources, links to additional community technology plans, and other resource materials are listed in this section.

Suggested Planning Process

A Guide for the Chair or Facilitator



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Suggested Planning Process
A Guide for the Chair or Facilitator

Suggested Time Table

Month	Activity
Month 1	Committee Meeting 1: Getting Started
Month 2	Committee Meeting 2: Presenting and Discussing Assessment Findings
Month 3	Committee Meeting 3: Presenting and Discussing Assessment Findings
Month 4	Committee Meeting 4: Planning Follow-Up Activities
Month 5*	Committee Meeting 5: Work Session
Month 6	Community Forum (optional) or additional work session
Month 7	Committee Meeting 6: Developing a Technology Plan
Month 8	Committee Meeting 7: Finalizing the Technology Plan
Month 9	Committee Meeting 8: Developing an Implementation Plan
Months 10+	Building Community Support and Implementing the Plan

**Some communities may need more than one work session.*

Establishing an Information Technology Committee

The first step in the strategic planning process is forming a community information technology committee. This committee may be a subcommittee of an existing community/economic development committee or a separate committee. Forming countywide or regional partnerships to address IT issues may help communities leverage their existing resources. Information technology committees should consist of 8-24 members, including representatives of the following sectors:

- local government
- business
- economic development organizations
- education
- health care
- libraries
- telecommunications providers (if possible)
- criminal justice, law enforcement, and emergency services
- non-profits, arts, culture, and history groups (if possible)
- and other significant groups or sectors with the community.

Extra effort should be made to recruit representatives of the community's largest users of telecommunications and information technology. If possible, meet with representatives of the largest telecommunications users to personally invite them to participate and to learn how they are using technology, how much they are spending on telecommunications and information technology, what are their current technology needs, what are their future technology needs, and what the community can do to help them meet their technology needs.

Committee members should be willing to commit to attending monthly meetings for nine to twelve months until the assessment and planning process is complete. Most meetings should take 2-3 hours. Implementation of the plan will require a continuing time commitment from committee members. After a technology plan has been developed, the committee may opt to meet for one to two hours every other month. During the implementation phase, other members may need to be recruited.

Committee Meeting 1

Getting Started

Who Should Attend

Members of the information technology committee

It is important that the individuals who can complete assessment information on the following e-readiness areas attend this meeting: community leadership and support; telecommunications infrastructure; technology literacy and access; advanced technology training; economic development and e-commerce; public library services; education; health care; local government and community services; criminal justice, law enforcement, and emergency services. If a representative from one of these areas cannot attend, the chair should make arrangements to have someone complete the assessment information for that area.

Estimated Time

2-3 hours

Materials Needed

Copies of the *Community Information Technology Planning Workbook* for each member of the committee

Preparation

Confirm that a representative of every area to be included in the community assessment will be present. If a representative will not be present, the chair should make arrangements to have someone complete the assessment information for that area.

Make copies the *Community Information Technology Planning Workbook* for each committee member.

Review the planning process described in this guide; the *Is Your Community an Information Age Community?* quiz (pages 33-37); the benchmark data (pages 25-27); the article on technology trends (pages 29-32), and the *Community E-Readiness Assessment* (pages 39-84).

Outcomes

- Committee members will have a better understanding of the characteristics of an Information Age community.
- Committee members will begin to develop a vision of their community as an Information Age community.
- Committee members will understand the assessment and planning process that will be used.
- Committee members will determine the breadth of the assessment. Rather than completing each section of the assessment, some communities may narrow the assessment to three or four areas. The areas most often included are community leadership; economic development and e-commerce; telecommunications infrastructure; and technology literacy and access.
- The committee will be organized to complete the initial assessment, including:
  - Designating section leaders to complete assessment information, and
  - Setting the next meeting date(s).

Tip: Facilitate Multi-Community Committees

Here are some tips from Patty Barstow, the Executive Director of the North Central Development Center in Ainsworth, who facilitated the development of a technology plan for Keya Paha, Brown and Rock Counties.

- Select committee members that are interested in technology growth.
- Have work sessions instead of meetings so you don't have to worry about quorums, etc.
- Have a large enough group to cover the members that lose interest or don't attend work sessions.
- Make sure all counties/communities are represented equally.
- Make sure all members have email and check it regularly.
- Have 2-3 hour work sessions and don't meet as often.
- Keep work sessions moving so members don't feel they are wasting time.
- Rotate meeting places between counties/communities and alternate times to accommodate members' schedules.
- Utilize e-mail for contact between work sessions.
- Conduct some work sessions via e-mail if most agenda items are following up previous discussions with research/feedback.
- Keep members well informed with work session dates/times, agendas, work session summaries, research web sites, etc.
- Request RSVP's for work sessions so you know who is planning to attend and who is reading their e-mail.
- Accept the fact that there will not be full attendance at all work sessions.
- Accept the fact that some members will lose interest.

Members from the committee were selected to represent each of the e-readiness areas. The most important thing is to have all committee members online and encourage (sometimes insist) they check their e-mail often. If you entice them with having some work sessions via e-mail they are more willing to check it regularly.

We conducted monthly work sessions that lasted from two to three hours. The rationale for this was to accomplish lots of work with the least amount of travel time (an issue in our rural area, especially in winter). Agendas were e-mailed several days before the work session then I followed each session with an email summary of what was discussed/decided. I also sent another e-mail mid-month with a reminder of the date of the next work session. I did most of the research for the survey, etc. then e-mailed information to the members so they could review them before the work session. This kept everyone up to date.

We rotated our work sessions between the three counties and also alternated between afternoon and evening. About midway through the process I began requesting RSVP's. I did this for two reasons. First, that told if some were not reading their e-mails. If I felt someone wasn't reading their e-mail regularly, I would call "just to update" them then casually ask them to watch for more info via e-mail. Second, it allowed me to change the meeting place, or even time, if all attendees happened to be from one community. For example, if everyone coming was from Ainsworth, we had the meeting here instead of everyone driving to a different town.

When working with a large group from several communities, you must assume there will not be full attendance at all work sessions. I tried to keep everyone informed and encouraged them to participate with feedback and attend the community forums.

Meeting Description

Welcome and Introductions. Thank members for coming. If members of the committee do not know each other, ask members to introduce themselves.

Provide an Overview. Explain that Information Age communities are communities which utilize information technology to enhance economic and community development. In order to give committee members a better understanding of the usage of information technology in the state and in the county, it is helpful to have committee members look at the benchmark data on pages 25-27 and the information on technology trends (pages 29-32).

Take the Quiz. Next, introduce committee members to the characteristics of Information Age communities by asking members to complete the nine-question *Is Your Community an Information Age Community?* quiz (pages 33-37). Ask the following questions to stimulate discussion:

- How many think the community is a Traditional Economy community? An Emerging Information Age community? An Information Age community?
- Was anyone surprised by how the community scored on this assessment?
- Many people equate information technology development with telecommunications infrastructure. This assessment only contained two questions on infrastructure. Was anyone you surprised by the inclusion of any of the questions on the assessment?
- What are the community's areas of strength?
- What areas are weaknesses?
- Can you envision the community becoming an Information Age Community in 5-10 years?
- Are you willing to help the community become an Information Age community?

After a discussion of the committee's preliminary assessment of the community's e-readiness, explain the importance of developing a community technology plan to help the community become an Information Age community.

Introduce Technology Planning. Explain the planning process which consists of the following steps:

- Forming an information technology committee;
- Conducting a preliminary technology assessment using the *Community E-Readiness Assessment;*
- Conducting supplemental assessment activities and building community support;
- Developing a technology plan; and
- Implementing the plan.

Introduce the *Community E-Readiness Assessment.* The *Community E-Readiness Assessment* (pages 39-84) has six e-readiness areas:

- Community Leadership and Support
- Economic Development and E-Commerce
- Telecommunications Infrastructure
- Technology Literacy and Access
- Advanced Technology Training
- Community Services and Information
    - Public Library Services
    - Education

- Health Care
- Local Government and Community Services
- Criminal Justice, Law Enforcement, and Emergency Services
- Non-profits, Arts, Culture, and History

Information is also included on quality of life and social capital. Although quality of life and social capital are important to a community's success in the Information Age, they are usually beyond the scope of a technology committee.

Complete the Community Leadership Section. Complete the Community Leadership section as a group.

Determine the Breadth of the Assessment. Although it is recommended that committee members assess all six areas, committees may narrow the focus of the assessment by skipping certain sections or subsections. For example, a community which does not have a hospital or medical clinic may wish to skip the health care subsection. Some groups have already identified their priority areas and may want to focus their assessment on those e-readiness areas.

Tip: Narrow the Focus of the Assessment

Consider narrowing the focus of the assessment to 3 to 5 e-readiness areas if:

- A committee is addressing IT-related development for the first time and finds the prospect of completing the entire assessment daunting;
- A committee is taking a regional approach and includes several communities;
- A committee has time constraints (i.e., needing to complete the assessment quickly or if the committee can only meet over lunch or other short periods of time);
- A committee has already clearly defined its areas of focus; or
- A committee recognizes that one issue (i.e., telecommunications infrastructure) is particularly pressing and will require a great deal of effort to address.

Assign Sections to Committee Members. Ask technology committee members to volunteer to be section leaders. Section leaders will be responsible for answering parts A and B in their section. For some sections, it may be helpful to get the input of other community members. For example, a group of business people could be asked to help answer the economic development/e-commerce sections. Each section is available as a Word document from http://www.nitc.state.ne.us/toolkit/workbook. Section leaders should be encouraged to download the section, complete it, and e-mail it to the facilitator/chair prior to the meeting at which their section will be discussed. It is suggested that Economic Development and E-Commerce; Telecommunications Infrastructure; Technology Literacy and Access; and Advanced Technology Training be discussed at meeting 2. Community Services and Information may be discussed at meeting 3.

Set Meeting Dates. Set tentative dates for the next meeting(s).

Committee Assignments

Section leaders should complete parts A and B for their assigned section.

Committee Meeting 2

Presenting and Discussing Assessment Findings—Part 1

- **Economic Development and E-Commerce**
- **Telecommunications Infrastructure**
- **Technology Literacy and Access**
- **Advanced Technology Training**

Who Should Attend

Members of the information technology committee

Estimated Time

2 hours (allowing 30 minutes for the Telecommunications Infrastructure session; 15 minutes for the Technology Literacy and Access section, 15 minutes for the Advanced Technology Training section; and 30 minutes for the Economic Development and E-Commerce section)

Materials Needed

Copies of the E-readiness Assessment Summary Worksheet
Laptop (optional) with Word version of the Community E-Readiness Assessment (available at www.nitc.state.ne.us/toolkit/workbook)

Preparation

If possible, have the section leaders e-mail you their assessment information. The assessment information can be e-mailed to committee members prior to the meeting. Confirm that section leaders for Economic Development and E-Commerce; Telecommunications Infrastructure; Technology Literacy and Access; and Advanced Technology Training will be present. If a section leader will not be able to attend, arrange to have an alternate present the findings from that section.

Tip: Keep the Assessment Process Moving

Try to limit the number of meetings devoted to going over the E-readiness Assessment to about two (not including the initial meeting). Groups which go over two meetings run the risk of losing task-oriented members who become frustrated at a perceived lack of progress.

The exact number of meetings required will vary. One group participating in the pilot was able to complete the E-readiness Assessment at their initial meeting. The group quickly narrowed down the assessment to four areas and completed all four sections. Most technology committees need two meetings to go over the assessment data.

In order to keep the assessment process moving, the facilitator or chair should collect assessment data from committee members and e-mail this information to members before the meeting. At the meeting, ask committee members to just give a brief overview of their findings, highlighting the most important information. At the beginning of the meeting state how much time will be allotted to the discussion of each area and keep reports within the allotted time.

Outcomes

- The initial community information technology assessment for Economic Development and E-Commerce; Telecommunications Infrastructure; Technology Literacy and Access; and Advanced Technology and Training will be completed.

Meeting Description

At the second information technology committee meeting, section leaders for Telecommunications Infrastructure; Technology Literacy and Access; Advanced Technology and Training; and Economic Development and E-Commerce should report their findings.

Get Started. If members did not receive copies of the completed e-readiness sections that are to be discussed via e-mail, pass out copies of the completed e-readiness sections. Pass out copies of the assessment summary worksheet to members. The worksheet will help members summarize the assessment findings. Remind section leaders to limit their presentations to the time allotted to them, asking them to just touch briefly on section A and spending more time on sections B and C. Suggested times for each e-readiness area are listed below:

- Telecommunications Infrastructure (30 minutes)
- Technology Literacy and Access (15 minutes)
- Advanced Technology Training section (15 minutes)
- Economic Development and E-Commerce (30 minutes)

Report E-readiness Findings. Section leaders for the areas listed above should give their reports. The committee should discuss section C for each section together, including how they would like the community to score in two to five years and the prioritization of each section. A recorder can record this information on a Word version of the assessment tool and on the E-Readiness Assessment Summary Worksheet.

Set Meeting Date. A date for the next meeting should be set.

Committee Assignments

Section leaders for the Community Services and Information subsections should complete parts A and B for their assigned subsection and e-mail this information to the chair prior to the next meeting. If the assessment information presented so far was not already recorded into the assessment document and the E-Readiness Assessment Summary Worksheet, the chair or recorder should complete these documents.

Committee Meeting 3

Presenting and Discussing Assessment Findings—Part 2

Community Services and Information

Who Should Attend

Members of the information technology committee

Estimated Time

2 hours (allowing 15-20 minutes for each subsection of the Community Services and Information section)

Materials Needed

Copies of the E-readiness Assessment Summary Worksheet
Laptop (optional) with Word version of the Community E-Readiness Assessment (available at www.nitc.state.ne.us/toolkit/workbook)

Preparation

If possible, have the section leaders e-mail you their assessment information. The assessment information can be e-mailed to committee members prior to the meeting. Confirm that section leaders for the Community Services and Information section will be present. If a section leader will not be able to attend, arrange to have an alternate present the findings from that section.

Outcomes

- The initial community information technology assessment for the Community Services and Information section will be completed.

Meeting Description

At the second information technology committee meeting, section leaders for the Community Services and Information section, including Public Library Services; Education; Health Care; Local Government and Community Services; Criminal Justice, Law Enforcement; and Emergency Services; and Non-profits, Arts, Culture, and History should report their findings.

Get Started. If members did not receive copies of the completed e-readiness sections that are to be discussed via e-mail, pass out copies of the completed e-readiness sections. Remind section leaders to limit their presentations to 15 minutes, asking them to just touch briefly on section A and spending more time on sections B and C.

Report E-readiness Findings. Section leaders should give their reports. The committee should discuss section C for each section together, including how they would like the community to score in two to five years and the prioritization of each section. A recorder can record this information on a Word version of the assessment tool and on the E-Readiness Assessment Summary Worksheet.

Set Meeting Date. A date for the next meeting should be set.

Committee Assignments

The chair or recorder should compile all the assessment information presented so far if this information was not already recorded into the assessment document and the E-Readiness Assessment Summary Worksheet.

Committee Meeting 4

Planning Follow-Up Activities

Who Should Attend

Members of the information technology committee

Estimated Time

1½ to 2 hours

Materials Needed

Copies of the completed E-Readiness Assessment Summary Worksheet, the Supplemental Assessment Activities Planning Worksheet, and the Building Community Support Planning Worksheet

Preparation

Send copies of the completed E-Readiness Assessment Summary Worksheet to committee members prior to the meeting or bring copies of the summary worksheet to the meeting.

Outcomes

- High-priority e-readiness areas will be identified.
- If additional information is needed, a plan will be developed to obtain that information.
- A plan for involving the community in the planning process and building community support will be developed.

Success Story: Edgar Documents Needs, Receives Grant

The Edgar technology committee worked with Kay Payne at the Center for Rural Research and Development at the University of Nebraska--Kearney to conduct a community needs assessment survey which included a section on information technology. The surveys were hand-delivered and picked up by community volunteers, leading to a very high response rate (87%). The results of the survey were presented at a town hall meeting. Over 50 people attended the meeting.

The needs assessment found that there was strong community support for a community center. The Community of Edgar used documentation from the needs assessment to prepare an application for the Community Development Block Grant program and received a $250,000 grant. Preliminary plans for the community center include a technology component.

Meeting Description

Use the Supplemental Assessment Activities Planning Worksheet and the Building Community Support Planning Worksheet to guide discussions and focus planning efforts.

Identify High-Priority E-Readiness areas. Use the completed E-Readiness Assessment Summary Worksheet to quickly list those e-readiness areas with the highest priority (Level 4).

Determine Additional Information Needed. Use the E-readiness Assessment Summary Worksheet to quickly identify which high-priority e-readiness areas require additional information to complete an assessment. What kind of information is needed? How can that information be obtained?

Develop a plan for collecting that information. Will you need to conduct a community survey, an engineering study, or another type of assessment? Use the Supplemental Assessment Activities Planning Worksheet to develop a plan for implementing these activities.

Develop a plan for building community support. Discuss how to involve the community in the planning process and to build community support for the plan.

Areas to consider:

- Should we host a community forum or town hall meeting to gather community input and to build support for the technology plan?
- If a community survey is being planned, should we include questions to gauge community support for technology-related development in general and possible activities (i.e., creating a community technology learning center or a technology incubator)?
- Should we present the assessment and the plan to the city council or county board?
- Should we present the assessment and the plan to community groups?
- Should we share the assessment and the plan with the press?
- Are there other ways to build community support?

Use the Building Community Support Planning Worksheet to develop a plan for building community support.

Set Meeting Date. A date for the next meeting should be set.

Member assignments

Members should work on any tasks assigned by the committee.

Committee Meeting 5

Work Session

Who Should Attend

Members of the information technology committee

Estimated Time

1½ to 2 hours

Outcomes

- Progress should be made on the additional assessment activities underway or on activities designed to build community support.

Meeting Description

Report on Progress. Committee members should report on any progress made on additional assessment activities or on activities designed to build community support.

Work on Activities. If needed, time should be allowed to continue working on supplemental assessment activities.

Set Meeting Date. A date for the next meeting should be set.

Community Forum (Optional)

Who Should Attend
Members of the information technology committee and members of the community

Estimated Time
2 hours

Outcomes
- Community members will understand the importance of information technology planning.
- Community members will begin to develop a vision of their community as an Information Age community.
- Community members will have the opportunity to provide feedback on the assessment and to prioritize areas for IT development.
- The committee will begin to build community support for information technology development and the plan that will be developed.

Forum Description
The forum should begin with a brief presentation which describes the importance of information technology and the need for communities to incorporate information technology into local economic development plans. After the presentation, committee members should present the results of their initial assessment.

After each presentation by section leaders, community members should be asked to indicate how they would like their community to score on the assessment in two to five years by a show of hands. At the end of the presentations by the section leaders, community members should be asked to indicate which areas are their highest priorities using the dot voting method or a show of hands.

Committee Assignments
The recorder should update the assessment document to include information from the forum. The updated assessment document should be e-mailed to members of the committee.

Committee Meeting 6

Developing a Technology Plan

Who Should Attend

Members of the information technology committee

Estimated Time

2 hours

Materials Needed

Copies of the completed assessment materials and the Technology Plan Planning Worksheet

Preparation

If a community forum was held, information from the forum should be e-mailed to members of the committee.

Objectives

- Committee members will prioritize the e-readiness areas, identifying 3-5 areas that will be included in the technology plan.
- Committee members will develop a draft vision statement.
- Committee members will develop draft action plans for each e-readiness area that will be included in the technology plan.
- The date for the next meeting will be set.

Meeting Description

Prioritize E-readiness Areas. Based on assessment findings (including input from a community forum if applicable), committee members should prioritize the e-readiness areas, identifying 3-5 areas that should be included in the technology plan. This can often be done by consensus. If the committee is large, priorities can be determined by writing each assessment area on a large sheet of paper and having each member "vote" by placing a dot sticker by his/her three highest priorities.

Develop a Vision Statement. Using the Technology Plan Planning Worksheet, develop a vision statement, describing a clear vision of what you would like your community to become in three to five years as a result of this technology plan. Include references to your community's priority e-readiness areas. You may want to use the descriptions of your target e-readiness level for each priority area as a starting point for the vision statement.

Tip: Identify a Volunteer to Draft Vision Statement

Writing in groups is often difficult and cumbersome. Once you have identified key points that should be included in the vision statement, it may be best to identify a volunteer or small group of volunteers to draft a vision statement and present it to the group at the next meeting.

Develop Action Plans. Use the Technology Plan Planning Worksheet to develop action plans for each e-readiness area which will be included in the plan. The section for each e-readiness area should include:

- Current e-readiness level
- Target e-readiness level
- Strengths
- Resources and assets
- Action plan (1 to 5 steps your community plans to take to address this area)

If the committee does not have enough time to complete the draft plan during the meeting, subcommittees can be formed to finish the sections for each priority area and present this information at the next meeting.

Set Meeting Date. A date for the next meeting should be set.

Committee Assignments

If necessary, members assigned to develop a vision statement or action plans should complete them before the next meeting.

Committee Meeting 7

Finalizing the Technology Plan

Who Should Attend
Members of the information technology committee

Estimated Time
2 hours

Materials Needed
Copies of the draft technology plan and the completed Building Community Support Worksheet

Preparation
If necessary, check with subcommittee members to see if they have completed their draft action plans and vision statement.

Objectives
- The technology plan will be finalized.
- Plans for building community support will be reviewed.

Meeting Description
Finalize Technology Plan. If certain sections were not completed at the last meeting, the subcommittee members assigned to complete them should present their sections to the committee for their approval.

Review Plan for Building Community Support. Building community support is a key component to the successful implementation of a plan. Review plans for building community support and discuss any modifications or additions that should be made to the plan.

Celebrate. This is a good time to celebrate the completion of the technology plan.

Committee Assignments
Committee members should begin meeting with various community groups to build community input and support for the strategic plan. Committee members should also work on any other tasks assigned.

Committee Meeting 8

Developing an Implementation Plan

Who Should Attend
Members of the information technology committee

Estimated Time
2 hours

Materials Needed
Copies of the technology plan and the Implementation Planning Worksheet

Preparation
Distribute any supplemental information to committee members via e-mail

Objectives
- Plans for building community support will be reviewed.
- Implementation plans will be developed.

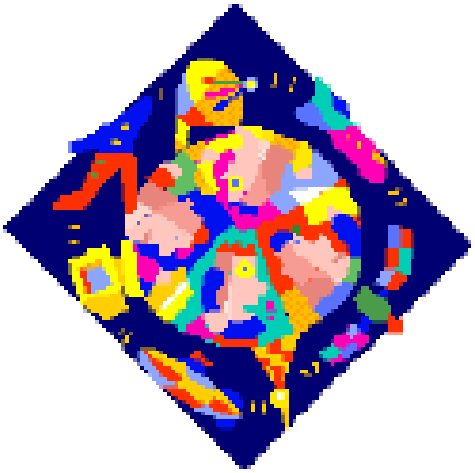
Meeting Description
Review Plan for Building Community Support. Building community support is a key component in the successful implementation of a plan. Review plans for building community support and discuss any modifications or additions that should be made to the plan.

Prioritize Implementation. Members should select two to five activities which will be undertaken first. Try to be realistic in determining the number of activities that can be undertaken. It is a good idea to choose both relatively easy activities which can be accomplished in less than a year and more challenging long-term activities which will take more than a year to complete. The implementation plan should be updated annually.

Develop Implementation Plans. Use the Implementation Planning Worksheet to begin developing an implementation plan. If additional time is needed, a subcommittee can be formed to continue working on the implementation plan and to present this information at the next meeting.

Set Next Meeting Date(s). As the committee moves from planning to implementation, some changes may need to be made to the committee membership and/or to the meeting schedule.

Benchmark Data



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Benchmark Data

Is your community above average, average, or below average on these indicators?

Households and Adults Online

Nearly 75% of U.S. homes have Internet access. 45% of Internet-connected homes now have broadband access. [1]

Only 52% of rural residents used the Internet in 2003, compared to 67%of urban residents and 66% of suburban residents. Libraries play an important role in providing access to computers and the Internet in rural areas. 8% of rural Internet users rely on libraries and locations other than work or home to access the Internet. [2]

In September, 2001, approximately 45% of Nebraska households were online. In comparison, approximately 50% of U.S. households were online[3]. 49% of Nebraska households with children (ages 3-17) had Internet access, ranking Nebraska 31 out of the 50 states.[4]

Businesses Using the Internet

In 2003, 73 percent of small businesses used the Internet and 48% of businesses had broadband services. 3.3% of small businesses used Voice Over IP (Pociask)[5].

A 2001 survey of small businesses conducted by the NFIB found that 45% of small firms have a Web site.[6] In comparison, a 2004 survey of Nebraska businesses found that only 31% of small businesses have a Web site.[7]

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[1] Reported by WebsiteOptimization.com citing a February 2004 Nielsen/Netratings survey. (http://www.websiteoptimization.com/bw/0403)
[2] Rural Areas and the Internet. (February, 2004). Pew Internet and American Life. (http://www.pewinternet.org)
[3] *A Nation Online: How Americans are Expanding Their Use of the Internet.* (February, 2002). National Telecommunications and Infrastructure Administration. (http://www.ntia.doc.gov/ntiahome/dn/index.html)
[4] Connecting Kids to Technology: Challenges and Opportunities. (June, 2002). Annie E. Casey Foundation. (http://www.aecf.org)
[5] Pociask, Stephen B. A Survey of Small Businesses' Telecommunications Use and Spending. (March, 2004). Small Business Administration Office of Advocacy. (http://www.sba.gov/advo)
[6] Dennis, William J., Jr. NFIB National Small Business Poll: The Use and Value of Web Sites. (2001). NFIB. (www.nfib.com)
[7] Center for Applied Rural Innovation. (2004). "E-Commerce in Nebraska: A Survey of Business Technology Use." Lincoln, NE: University of Nebraska. Available at http://cari.unl.edu/business%20report.pdf

Farmers Using the Internet

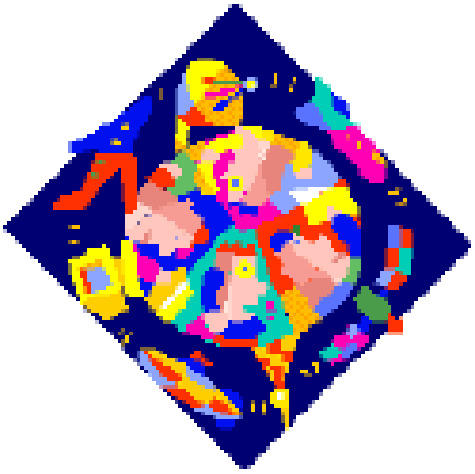
58% of U.S. farms have access to a computer and 48% of U.S. farms have Internet access. 30% of farms use computers for farm business.[8]

In Nebraska, 61% of farms have access to a computer and 48% have Internet access. 38% of farms use computers for farm business. 8% of Nebraska farmers purchase agricultural inputs over the Internet, and 9% conduct agricultural marketing activities over the Internet.[9]

[8] "Farm Computer Usage and Ownership." (July 28, 2003). National Agricultural Statistics Service (NASS), Agricultural Statistics Board, U.S. Department of Agriculture. (http://jan.mannlib.cornell.edu/reports/nassr/other/computer/fmpc0703.pdf)

[9] "Farm Computer Usage and Ownership." (July 28, 2003). National Agricultural Statistics Service (NASS), Agricultural Statistics Board, U.S. Department of Agriculture. (http://jan.mannlib.cornell.edu/reports/nassr/other/computer/fmpc0703.pdf)

5 Technology Trends for Communities



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5 Technology Trends for Communities

E-commerce is continuing to grow.

As more adults—especially women have begun shopping online, e-commerce revenues have grown to $114 billion in 2003 according to Shop.org, and Forrester Research. In 2003, for the first time, online revenues exceeded 5% of total retail sales. Online retail sales are projected to increase 27% to $144 billion in 2004 with the largest increases expected in health and beauty products, apparel, flowers, cards, and gifts. Because online small businesses sell primarily to consumers, the growth in retail e-commerce promises to benefit small businesses positioned to take advantage of e-commerce.

Many small businesses have developed Web sites to expand their markets. A 2001 survey of small businesses conducted by the NFIB found that 45% of small firms have a Web site. The survey found that a majority of small businesses with Web sites reported gaining new customers (67%), improving competitive position (62%), and increasing total sales (56%) Nearly two-thirds of small businesses with Web sites made a profit or covered the costs of their Web sites. However, only 24% of businesses with Web sites generate revenue from online sales. Most businesses say that Web sites stimulate purchases either at the place of business or by e-mail, fax, or phone. Very small firms benefit the most from being online. Over a third (35%) of businesses with fewer than 10 employees gain 10 to 99 percent of current sales directly or indirectly from their Web sites.

More recent data indicates the continued impact of e-commerce on small businesses. A 2004 survey of small businesses commissioned by eBay and conducted by ACNeilsen found that a majority of small businesses say that the Internet has helped their business grow (58%) and become more profitable (51%). A small but significant number of small businesses (15%) report that they could not survive without the Internet.

The impact of the Internet on small business goes beyond retail sales. Nearly half (49%) of all businesses in the eBay/ACNeilsen survey reported that the Internet has helped them reduce costs. Small businesses are using the Internet to purchase computers and office technology (54%), capital equipment and supplies (48%), and other business-related goods (59%).

A small but growing number of Nebraska businesses are generating revenue from Web sites. Fifteen percent of Nebraska businesses with Web sites say that their site has helped generate a great amount of profit. In 2002, Nebraska businesses with Web sites on averaged earned 5.5% of their revenue from their Web sites.

Nebraska firms appear to be adopting e-commerce at a slower rate than firms nationwide. A 2004 survey of Nebraska businesses found that only 31% of small businesses have a Web site. In comparison, 45% of small businesses nationwide had a Web site in 2001.

However, Nebraska businesses are interested in implementing e-commerce practices. Over half of Nebraska businesses believe that providing detailed product/service information online (66%), reaching new customers (65%), being able to place online orders with suppliers (56%), and improving customer service through the Web (55%) will be important to their business in the future. Over 40% percent of Nebraska businesses are considering using information technology to expand or restructure their business in the future. The biggest perceived barrier to using e-commerce practices is the preference of business owners for personal contact with customers (79%). Other

barriers are lack of time to implement and/or maintain a web site (71%), cost of developing and maintaining an Internet system (68%), and knowledge of e-commerce practices (67%).

Citizens and local officials are increasingly using e-government.

The July 2003 survey by the Pew Internet & American Life Project found that 97 million adult Americans, or 77% of Internet users, used e-gov in 2003 by going to government Web sites or e-mailing government officials. This represented a growth of 50% from 2002.

Local government officials are also using the Internet to communicate with constituents. A Pew Internet found that 88% of locally-elected officials use the Internet. Over 70% of online officials note that e-mail exchanges with constituents help them better understand public opinion.

Telehealth is expanding.

In August, 2004, connections were made among the telehealth networks in the state and the State of Nebraska, connecting most of the state's hospitals. Within the next year, additional hospitals and health department will be connected to the Nebraska Telehealth Network. The statewide network will expand access to specialist services, continuing medical education, and bioterrorism alerts.

Home telehealth is one of the fastest growing applications of telemedicine. Several studies have indicated that home telehealth has a positive impact on the lives of patients and can reduce health care costs. Although some home telehealth systems can use the plain old telephone system (POTS), broadband availability in a community facilitates the delivery of home telehealth programs.

Voice Over IP (VoIP) is changing the telecommunications landscape.

Voice over Internet Protocol (VoIP) offers the capability to transmit voice communications over the Internet or private networks using Internet Protocol. At the end of 2003, there were 150,000 VoIP subscribers. Gartner predicts that the number of subscribers will grow to 1 million by the end of 2004 and to 6 million by the end of 2005. Most VoIP services offer customers a range of features including voicemail, CallerID, call forwarding, 3-way calling, and call blocking. Customers have the option of choosing a phone number from nearly any area code in the country, and VoIP may offer true number portablility. This may be one of the key drivers of VoIP. Currently, VoIP services are not subject to many state or federal taxes and fees, and thus can offer very attractive calling plans. There are some drawbacks to VoIP. For instance, not all VoIP providers offer 911 emergency service capability.

Andrew Cohill writes: "VoIP is the killer app for broadband. It's what all those enormous dot-com investments in infrastructure were hoping for back in 1999 and 2000. It is the trifecta--it will lower prices for current voice services, it will introduce valuable new voice

services at little or no additional cost, and the use of VoIP will spur competition and attract new and other kinds of services."

Cities are creating WIFI zones.

A number of cities are creating wireless hotspots or WIFI zones, including Spokane, Washington; South Sioux City, Nebraska; and Carroll, Iowa. These WIFI zones are popular with business people because they can check their e-mail when they are out of the office. Many cities are finding that wireless Internet access facilitates efficient city operations. In South Sioux City, police officers can view real-time video from the South senior/junior high school complex. Sioux City Public Schools or access the Nebraska Criminal Justice Information System from their patrol cars. The South Sioux City public works department is using the wireless network to access the water department SCADA (Supervisory Control and Data Acquisition) system. In Texas, WIFI access is being installed at rest stops to encourage travelers to stop and rest.

WIFI is not just for laptops or e-mail. In the future, WIFI zones will be used for making phone calls and playing games. Some cellular phones are capable of making VOIP calls when in a WIFI zone and Nintendo's new DS handheld will include WiFi. As the number of uses for WIFI increase, the demand for widespread coverage will increase.

Terms to Know

Voice over Internet Protocol (VoIP) is the transmission of voice communications over the Internet.

WIFI is short for wireless fidelity and refers to any type of 802.11 network which can be accessed by a computer with a wireless networking card.

Mesh networks provide redundant connections among access points and eliminates the need to have a connection to the Internet at each access point. The new mesh network equipment is making it more affordable to create WIFI networks.

Sources of Information

Design Nine
www.designnine.com

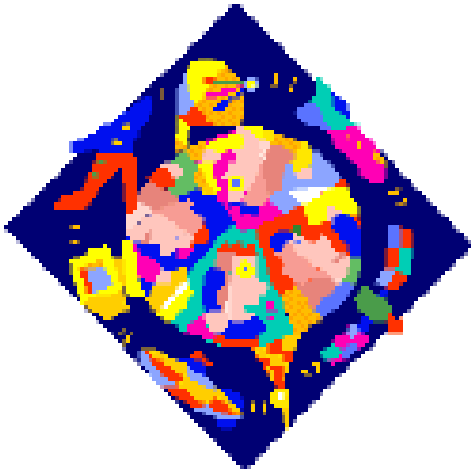
Pew Internet and American Life
www.pewinternet.org

TANgents
technologiesacrossnebraska.unl.edu

NITC.news
www.nitc.ne.us/news

Is Your Community
An Information Age Community?

A quiz for initiating community discussions



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Is Your Community an Information Age Community?

1. Are community leaders aware of the importance of information technology and do they work together to address IT development issues?

Yes No

2. Are high bandwidth services available to all businesses, organizations, and residents?

Yes No

3. Does your community have affordable access to telecommunications services? Affordable access and high-speed access are often two different things. Both should be available in a community.

Yes No

4. Does your community have public access sites and free or affordable training on basic computer and Internet skills?

Yes No

5. Are there opportunities for advanced information technology training through local high schools, colleges and universities, or other institutions?

Yes No

6. Are economic development initiatives tied to the needs of Information Age businesses? These efforts should include the development and support of local entrepreneurs and the development of a skilled workforce.

Yes No

7. Are online community services and information--including government, schools, and libraries--available? In many communities, information technology may be an effective and efficient way to improve access to health care.

Yes No

8. Are there good lines of communication and good working relationships among community institutions and citizens? Information technology can be used to inform and involve citizens, building social capital. Communities in which institutions and citizens work well together are more successful in their development efforts.

Yes No

9. Does your community pay careful attention to quality of life issues? A high quality of life is essential to attract and retain IT workers and businesses.

Yes No

Scoring. Give your community one point for each question answered with a "yes":
0-2 Traditional Economy Community
3-7 Emerging Information Age Community
8-9 Information Age Community

Many of these assessment questions were drawn from "Building eCommunities: Getting Everyone Connected" by Andrew Michael Cohill, available at www.designnine.com/library/docs/ecommunities.pdf .

Traditional Economy Communities

Traditional Economy Communities may initially need to focus their efforts on leadership development and helping community members understand the benefits of the Information Age. Communities—especially smaller communities—may benefit from forming countywide or regional partnerships to address IT issues. For example, hosting a countywide technology fair may be more feasible than having an individual community host the event.

Many Traditional Economy Communities may find it more productive to focus on short-term goals initially. As community leaders and citizens become more knowledgeable about IT issues, a more thorough plan with long-term goals can be developed. Examples of activities that Traditional Economy Communities may want to consider are listed below:

- Host a community IT tour to see firsthand how local businesses, schools, health care providers, and governments are using IT.
- Tour an Information Age Community.
- Encourage emerging community leaders to participate in a leadership development program.
- Host a technology fair.
- Host introductory computer and Internet classes. Encourage community leaders who have little experience to attend.
- Host introductory e-commerce classes. Encourage community leaders—especially economic development and Chamber of Commerce staff—who have little experience to attend.
- Provide public access to computer resources and the Internet or develop a community IT learning center.
- Help businesses develop an initial Web site.
- Explore strategies for encouraging the deployment of advanced services and stimulating competition.
- Build partnerships within the community and region and become familiar with state, federal, and foundation resources.
- Encourage community leaders to attend regional or statewide conferences or workshops on IT development.
- Utilize e-mail discussion lists or Web sites for information on IT development.
- Address quality of life issues.
- Make local information available online.

Emerging Information Age Communities

Emerging Information Age Communities are diverse in their needs and in the maturity of their IT leadership. Emerging Information Age Communities may be new to the strategic planning process, may have begun the strategic planning process but need to reenergize their leadership, or may be well on their way to becoming Information Age Communities. Forming countywide or regional partnerships to address IT issues may help communities leverage their existing resources.

Examples of activities that Emerging Information Age Communities may want to consider are listed below:

- Strengthen partnerships within the community and region.
- Encourage community leaders to attend regional, statewide or national conferences or workshops on IT development.
- Encourage community leaders to utilize e-mail discussion lists or Web sites for information on IT development.
- Host a technology fair.
- Host a community IT tour to see firsthand how local businesses, schools, health care providers, the library, and governments are using IT.
- Tour an Information Age Community.
- Host introductory and advanced computer, Internet, and networking classes.
- Host introductory and advanced e-commerce classes.
- Integrate IT into community and economic development plans and processes.
- Encourage the development of IT support services within the community or region.
- Encourage entrepreneurship development.
- Examine current regulations to see how they impact Information Age businesses.
- Help businesses move from static Web sites to conducting transactions online.
- Encourage the deployment of advanced services and stimulate competition.
- Address youth retention through school to work or other initiatives.
- Increase local services and information available online or through other IT technologies (i.e., distance learning or telehealth).
- Address quality of life issues.

Information Age Communities

Information Age Communities are keenly aware that IT development is a moving target. Although Information Age Communities often are still working on some of the activities and strategies suggested for Emerging Information Age Communities, they are also undertaking more ambitious projects. Information Age Communities often look to other Information Age communities across the United States and internationally for ideas. If involved in a countywide or regional partnership, the Information Age community assumes a leadership role. Community leaders from Information Age Communities also often participate in policy development at the state and federal level.

Blacksburg, Virginia pioneered the concept of an Information Age community. Back in the late 1980s, Virginia Tech proposed using telecommunications to connect residents by building a community network. Today, Blacksburg has the highest per capita use of the Internet in the world. Over 60 percent of Blacksburg's residents have high-speed broadband access in their businesses and apartments. Over 24 technology companies

have been started in Blacksburg in the last five years and the Virginia Tech Corporate Research Center is one of the fastest growing business parks in the nation.[10]

In Nebraska, Aurora is a good example of an Information Age community and the synergistic outcomes of Information Age development. Through a strategic planning process, Hamilton County developed a strategic information technology plan in 1994. The plan was updated in 1999. By bringing representatives of the key institutions in the county together and systematically addressing the IT needs of the county, Aurora and Hamilton County have begun to realize the benefits of the Information Age. Aurora's initial technology fair in 1994 increased community awareness of the importance of information technology and helped build community support for the deployment of information technology in the schools. A videoconferencing system in the hospital is used primarily for consultations and training for medical center and hospital staff, but is also available for use by local businesses. Hamilton Telecommunications has a telemarketing center and provides TDD services for five states. As demand for advanced services has grown, Hamilton Telecommunications has deployed DSL and ISDN in the community. A software company moved to Aurora, attracted by the availability of office space, advanced telecommunications services, and the quality of life.

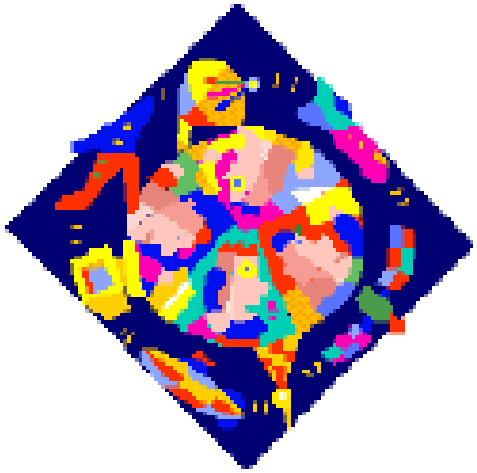
On April 1, 2001, the Aurora Technology Center opened its doors to technology-related start-ups and businesses needing to make strategic changes. With the opening of the Aurora Technology Center, Hamilton County realized a major goal of the 1999 strategic IT plan due to the combined efforts of community members and the Hamilton County Information Technology Corporation. The Aurora Technology Center utilized various funding sources, donations and many volunteer hours to convert a former nursing home into a facility with 22 offices, conference room, sixteen-station Technology Training Center, with high-speed Internet access (DSL) and cable available throughout and with office equipment and furnishings not normally available to start-up businesses. More importantly to the clients and the business community at-large, the Aurora Technology Center provides professional consulting, business and technology training focusing on the use of technology to strengthen and create new opportunities via e-commerce, and networking with other start-up and entrepreneurial organizations. Aurora Technology Center client businesses provide content management, network security, customized training, civil engineering, funding and grant research and proposals, social science research, agricultural lending, Web site development, business and technology consulting, home energy auditing and software development. With seven clients employing 20-23 people, the Aurora Technology Center has reached an occupancy rate of 75%, filling 15 of the 22 offices[11].

This assessment tool was developed by Anne Byers, Community IT Manager for the Nebraska Information Technology Commission, with input from members of the Community IT Toolkit Committee.

[10] See*"Building eCommunities: Getting Everyone Connected" by Andrew Michael Cohill, available at www.designnine.com/library/docs/ecommunities.pdf .*

[11] Information on the Aurora Technology Center was provided by Christine Angerame, July, 2003.

Community E-Readiness Assessment



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Section I: Community Leadership and Support

Are community leaders aware of the importance of information technology and do they work together to address IT development issues?

Community leadership and support is the cornerstone to all local development efforts. Forming an effective technology committee requires strong representation from all sectors of the community. Many communities struggle to get local government officials and local business people involved.

It may be helpful to meet with key individuals to personally invite them to participate in the technology committee and to gain a better understanding of how their organization is currently using information technology,

Here are some questions you may want to ask:

- How is your organization using technology?
- What is your organization spending on telecommunications and information technology annually? What percentage of those expenditures are leaving the community? Is there a way that these expenditures could be kept in the community?
- What are your organization's current technology needs?
- What are the future technology of your organization?
- What can the community do to help your organization meet its technology needs?

As a group, discuss the membership of your technology committee. Does your technology committee have strong representation from all sectors? Are there additional community leaders and representatives who should be invited to participate?

Sector	Current Members	Prospective Members
Business (including representatives of the 10-20 largest employers/users of technology). If agriculture is important to the local economy, agricultural producers and agribusinesses should also be represented.		
Local government (including administrators and/or elected officials, law enforcement, users of Geographic Information Systems)		
Economic and community development leaders		
Educational leaders (including K-12 and postsecondary institutions serving the area)		
Library director		
Health care providers		
Non-profits, arts, history and cultural organizations		
Senior citizens, youth, and/or other significant demographic groups		
Telecommunications providers		

A. This section should be completed by the information technology committee as a group.

Community leadership and support factors to assess:	**yes**	**no**	**future action***
Has a strategic information technology plan been developed?	☐	☐	
Have there been community meetings to build community input and support for the strategic plan?	☐	☐	
Is there widespread support for information technology-related development?	☐	☐	
Is there a local champion of information technology development?	☐	☐	
Are public/private partnerships used to accelerate information technology development?	☐	☐	
Have cooperative arrangements been made for entities to aggregate demand and share costs related to information technology?	☐	☐	
Have local sources of funding for IT-related projects been identified?	☐	☐	
Does the community have a group of people assigned to seek out and follow up on alternative funding strategies for IT development?	☐	☐	
Have grant opportunities from federal, state, and private sources been researched?	☐	☐	

*** This checklist has been designed as both an assessment tool, helping the community learn what is already in place, and as a list of possible activities a community may want to consider undertaking. Use this column to make notations indicating interest in undertaking an activity or indicating that this is an area in which more information is needed.**

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate how well community leaders are addressing IT development:

1 Many business and community leaders do not understand the importance of information technology. There is little community support for IT-related development.

2 Some business and community leaders understand the importance of information technology, but information technology development is not being addressed by the community or region. There is some community support for IT-related development.

3 Many business and community leaders understand the importance of information technology and there are efforts to cooperatively address information technology development. There is moderate community support for IT-related development.

4 All key community and business leaders understand the importance of information technology and are working cooperatively to address information technology development. There is widespread community support for IT-related development.

What are our strengths in the area of community leadership?

What resources and assets are available in the community to address community leadership? What resources and assets are available regionally or in the state?

Nebraska resources include Technologies Across Nebraska (technologiesacrossnebraska .unl.edu), the University of Nebraska Extension—particularly the Connecting Nebraska Team (connecting.unl.edu), the Nebraska Information Technology Commission (www.nitc.state.ne.us). The Community IT Toolkit (www.nitc.state.ne.us/toolkit) has a number of resources.

What are some ways in which community leadership could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?

1 Many business and community leaders do not understand the importance of information technology. There is little community support for IT-related development.

2 Some business and community leaders understand the importance of information technology, but information technology development is not being addressed by the community or region. There is some community support for IT-related development.

3 Many business and community leaders understand the importance of information technology and there are efforts to cooperatively address information technology development. There is moderate community support for IT-related development.

4 All key community and business leaders understand the importance of information technology and are working cooperatively to address information technology development. There is widespread community support for IT-related development.

How would you prioritize community leadership development?

1 Low priority
2 Medium priority
3 High priority
4 Highest priority

Section II: Economic Development and E-Commerce

Are economic development initiatives tied to the needs of Information Age businesses? These efforts should include the development and support of local entrepreneurs and the development of a skilled workforce.

Economic development is the driver behind technology-related development efforts. Accordingly, this section is more in-depth than many of the other sections.

List the 20 largest employers in your community.

1.	**11.**
2.	**12.**
3.	**13.**
4.	**14.**
5.	**15.**
6.	**16.**
7.	**17.**
8.	**18.**
9.	**19.**
10.	**20.**

List the 20 largest users of technology in your community. In many communities, the list of largest of employers and largest users of technology will be similar. If you cannot list the 20 largest users of technology, identifying these organizations may be a good initial activity for the committee.

1.	**11.**
2.	**12.**
3.	**13.**
4.	**14.**
5.	**15.**
6.	**16.**
7.	**17.**
8.	**18.**
9.	**19.**
10.	**20.**

Are representatives of the largest employers and users of technology on your technology committee? Their participation and support is critical to the success of local technology-related development efforts.

Members of the technology committee may want to consider visiting the largest employers/users of technology to invite them to participate in technology-related development efforts and to determine:

- How are the largest employers/users of technology using technology?
- What are the largest employers/users of technology spending on telecommunications and information technology annually? What percentage of those expenditures are leaving the community? Is there a way that these expenditures could be kept in the community?
- What are the current technology needs of the largest employers/users of technology?
- What are the future technology needs of the largest employers/users of technology?
- What can the community do to help them meet their technology needs?

A. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

Economic development factors to assess:	yes	no	future actions
Does the community's economic development strategic plan recognize threats and opportunities posed by the Information Economy?	☐	☐	
Is there a coalition of public and private organizations who support the development and recruitment of information technology businesses?	☐	☐	
Have community leaders formally targeted information-based businesses for development and recruitment to the community? Are any or all of the following targeted?			
▪ Back-office businesses such as finance centers, title companies, insurance companies?	☐	☐	
▪ Inbound call centers providing order taking or service?	☐	☐	
▪ Telemarketing firms?	☐	☐	
▪ Warehouse and shipping companies?	☐	☐	
▪ Video or audio development companies?	☐	☐	
▪ Brokerage firms?	☐	☐	
▪ Software development companies?	☐	☐	
▪ Web service companies?	☐	☐	
▪ Regional headquarters of companies?	☐	☐	
▪ Information technology manufacturers?	☐	☐	
Is the community assisting businesses by developing and/or recruiting information workers?	☐	☐	
Are city, county, and regional authorities prepared to "fast track" approvals for construction, site plans, utility extensions, inspection, etc. in order to meet a new or expanding business's time frame?	☐	☐	
Have economic development leaders fashioned incentives that fit information-based businesses? These may be training programs, facilities, property tax incentives, capital investment incentives or other innovative programs.	☐	☐	

Economic development factors (continued):	yes	no	future actions
Does the community have a program to incubate or assist information technology businesses?	☐	☐	
Is there a program to foster telecommuting work at home through information technology?	☐	☐	
Does the community work to attract “lone eagles” – professionals who are able to work anywhere they choose because of information technology?	☐	☐	
Do travel/tourism organizations use the Internet to promote restaurants, lodging and attractions in the area?	☐	☐	
Is the Internet used for economic development research and prospecting?	☐	☐	
Does the community Web site have information on the following:			
▪ Available sites and facilities?	☐	☐	
▪ Available telecommunications infrastructure?	☐	☐	
▪ Available utility services?	☐	☐	
▪ Labor statistics including availability, skill levels, and wage levels for representative job classes?	☐	☐	
▪ Training programs?	☐	☐	
▪ Incentive programs (if any)?	☐	☐	
▪ Educational institutions?	☐	☐	
▪ Housing information?	☐	☐	
▪ Contact people?	☐	☐	
Does the local chamber of commerce recognize businesses that are innovatively using information technology in the community?	☐	☐	
Does the community have a technology park or a facility that can house an information technology business?	☐	☐	
Does the community have information technology support services (i.e., computer and printer repair services or network support services)?	☐	☐	
Have local or state economic development officials worked to create “clusters” of similar types of information businesses? Such clusters are able to address training needs, infrastructure needs, governmental regulatory problems, and attract similar businesses. Examples include call center associations, lone eagle groups, and Web developer associations.	☐	☐	

Electronic commerce factors to assess (continued):	**yes**	**no**	**future actions**
Are there resources (public or private) in the community for businesses who want to learn to conduct electronic commerce?	□	□	
Are at least 75% of small businesses online?	□	□	
Do at least 50% of small business have broadband access?	□	□	
Do at least 50% of small businesses have a Web site?	□	□	
Can local businesses accept credit card payments or other types of payments which can be made electronically?	□	□	
There are several types of electronic commerce. Are 50-75% of small businesses in the community using the Internet to:			
▪ Research market information?	□	□	
▪ Research competitors' offerings and prices?	□	□	
▪ Send e-mail and transfer documents?	□	□	
▪ Track government and large company procurement announcements?	□	□	
▪ Advertise products?	□	□	
▪ Purchase materials and supplies?	□	□	
▪ Sell products using a toll-free number advertised on the Web?	□	□	
▪ Sell products over the Web using credit card transactions?	□	□	
Is there a business in the community that offers Web design services?	□	□	
Is there more than one business in the community that offers Web design services?	□	□	
Does a local Internet service provider host Web sites for local businesses?	□	□	
Are there two or more local Internet service providers hosting Web sites?	□	□	
Are there local outlets for shipping products in a timely manner?	□	□	
Are these tools generally being used by small businesses in the community:	□	□	
▪ Computerized accounting/bookkeeping?	□	□	
▪ Computerized inventory (if there is an inventory)?	□	□	
▪ A business plan which incorporates information technology?	□	□	

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate your community's economic development and e-commerce readiness:

1 Economic development efforts do not address Information Age businesses. Few local businesses are using information technology to improve productivity and expand markets.

2 There is some recognition in the community that information technology is an economic development tool. Some local businesses are using information technology effectively to improve productivity and expand markets.

3 Economic development efforts are beginning to target Information Age businesses. Most small businesses are using information technology effectively to improve productivity and expand markets. At least 50% of businesses have a Web site and 75% of businesses are online.

4 Economic development efforts are tied to the needs of Information Age businesses. Nearly all small businesses have integrated information technology into their business processes and plans.

What are our strengths in the area of economic development and e-commerce?

What resources and assets are available in the community to address economic development and e-commerce? What resources and assets are available regionally or in the state?

The Nebraska Electronic Main Street program offered by the University of Nebraska Cooperative Extension's Connecting Nebraska Team introduces businesses to e-commerce (connecting.unl.edu). Community colleges may also offer e-commerce programming. The Nebraska Department of Economic Development (www.neded.org) may be able to provide assistance in technology-related development efforts. NPPD (www.nppd.com) and local power districts may also offer assistance for economic development efforts. Other resources for helping small businesses and entrepreneurs include Grow Nebraska (www.grownebraska.org), Nebraska Cooperative Development Center's Buy Nebraska program (www.buynebraska.org), REAP (www.cfra.org/reap/), and the Nebraska EDGE program (nebraskaedge.unl.edu).

What are some ways in which economic development and e-commerce could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

The NFIB surveyed small businesses in 2001 on their use of e-commerce and the impact it was having on their businesses. The report includes a list of the survey questions used and is a great starting point for developing a business survey. The report is available at http://www.nfib.com/attach/3193. If you survey businesses, you may also want to include a question on whether they are currently using Voice over IP or if they plan to use Voice over IP in the next two years.

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?

1 Economic development efforts do not address Information Age businesses. Few local businesses are using information technology to improve productivity and expand markets.

2 There is some recognition in the community that information technology is an economic development tool. Some local businesses are using information technology effectively to improve productivity and expand markets.

3 Economic development efforts are beginning to target Information Age businesses. Most small businesses are using information technology effectively to improve productivity and expand markets. At least 50% of businesses have a Web site and 85% of businesses are online.

4 Economic development efforts are tied to the needs of Information Age businesses. Nearly all small businesses have integrated information technology into their business processes and plans.

How would you prioritize economic development?

1 Low priority
2 Medium priority
3 High priority
4 Highest priority

Section III: Telecommunications Infrastructure

Glossary of Telecommunications Infrastructure Terms

Access Point. Location on a network where switches or other electronic devices have been installed so that there is access to the network. There are also pricing access points where the network is not actually accessed but the service is priced as if there was physical access to the network at that location. The carrier "backhauls" the service to the physical location point.

Backbone. A high-speed line or series of connections that forms a major pathway within a network. The term is relative as a backbone in a small network will likely be much smaller than many non-backbone lines in a large network.

Bandwidth. The amount of information can be transmitted at one time based on the range of electrical frequencies the end devices on the network can handle.

Broadband Services. Broadband services exceed 200 kilobits per second in both directions. Some experts estimate that in 4 to 5 years, broadband with speeds of 25 to 40 megabits per second will be needed. DSL and cable modems typically provide 1-2 megabits per second. Most of the DSL that is in place is capable of handling 8 megabits per second by changing plug-in cards. DSL equipment is becoming available in two new versions. One version is capable of 20 Mbps and the second is capable of 40 Mbps. Most cable modem systems are capable of 30-40 megabits per second.

Cable Modem Service. High-speed data service received through the cable system. The speed is typically 1-2 Mbit/s, although systems are capable of providing speeds of 30 to 40 Mbps and the distance can be 100 km or even more.

Dark Fiber. Fiber furnished with no termination equipment (i.e., lasers or electronics). Purchasing or leasing dark fiber requires the entity securing the service to invest the capital dollars for the terminating lasers and electronics.

DSL (Digital Subscriber Line). High-speed services provided over copper telephone lines providing voice and data (typically Internet) services. The reach (distance from the main telephone office or any remote line group in the countryside) has ranged from 18,000 route feet to approximately 24,000 route feet. Recently a new vendor product has become available, being deployed in Nebraska, that allows for retrofitting many of the existing DSL lines to achieve a range of over 40,000 feet providing multiple voice lines and data at speeds up to 712 Kpbs in both directions.

Duct. A conduit, usually placed in "bundles" of four or more (depending upon the number the carrier thinks may be needed in the next 20 or so years), through which fiber cable is placed (pulled). Copper cables occupy many older conduits and can be pulled out to make room for fiber and thus gaining significant capacity.

Fiber (Optics). Thin filaments of glass through which light beams are transmitted over long distances carrying enormous amounts of data. Modulating light on thin strands of glass produces major benefits in high bandwidth, low power consumption, small space needs, security, and total insensitivity to electromagnetic interference.

Fiber Cable. The assembling of many thin filaments of glass into a single cable where the bundled glass filaments are then protected by exterior sheathing of polyethylene and sometimes a metal wrap with another sheathing of polyethylene material.

Fixed Wireless Data Service. High-speed services provided over wireless to a fixed location. Often a dish or receiver must be attached to the roof and positioned to face the nearest wireless transmitter.

High-Speed Services. Most consumers consider high-speed services to be anything faster than a dial-up 56 kbps connection. This is the simplest definition and the one that we will use in this workbook. Some people equate the term high-speed services to broadband which is defined by the FCC as faster than 200 Kbps. Others—usually those who have worked with telecommunications for some time—use the term high-speed services to mean speeds faster than a T-1 or faster than 1.544 Mbps.

ISDN (Integrated Services Digital Network). ISDN can typically provide speeds of roughly 128,000 bits per second over phone lines. ISDN is used for videoconferencing and can be more cost effective than having a T-1 line or fractional T-1 for an occasional user of videoconferencing because it is often priced based on hours of use. ISDN is a 2B + D configuration. The "B" channels are 56Kbps and the "D" channel is 16 Kbps. You can configure up to a 23B + D service which would equal a T-1 or 1.544 Mbps.

Mesh Networks. Mesh networks provide redundant connections among access points and eliminates the need to have a connection to the Internet at each access point. The new mesh network equipment is making it more affordable to create WIFI networks.

Mobile Digital Wireless Data Service. Voice and data (e-mail, etc.) can be transmitted to a digital cellular phone, PDA, or laptop equipped with a wireless receiver. WIFI is one of the most popular forms of mobile digital wireless data service.

Voice over Internet Protocol (VoIP). VoIP is the transmission of voice communications over the Internet.

WIFI. WIFI is short for wireless fidelity and refers to any type of 802.11 network which can be accessed by a computer with a wireless networking card.

WiMax. WiMax is a wireless network running the Institute of Electrical and Electronics Engineers Inc.'s 802.16 standard, using licensed and unlicensed radio spectrums. The 802.16d standard, also known as 802.16-2004, can provide line-of-sight communication for up to 30 miles, though in-building coverage is estimated at closer to two miles.

T1. A dedicated connection providing transmission capacity of 1.54 Mbps. A T-1 can be multiplexed into 24 DSO channels. DSO is a 56 Kbps channel—the bandwidth used for voice service. The technical term for a T-1 is a DS-1 where DS stands for Digital Service.

DS-3. Sometimes referred to as a T-3, a DS-3 contains 28 T-1 lines (45 Mbps).

OC-3 (Optical Carrier-3). An OC-3 contains 3 DS-3s (155 Mbps). Note: The math of multiplying the number of T-1s in a DS-3 and the number of DS-3s in an OC-3 does not equate because of bandwidth used for signaling and control of the circuits.

*Roger Hahn from the Nebraska Information Network provided assistance in the development of this glossary. For definitions of additional terms, see the CSPP Readiness Guide Glossary of Terms (**www.cspp.org/projects/readiness/glossary.htm**) or the Glossary of Technical Terms (**www.nitc.state.ne.us/itc/citizens/glossary.htm**). CENIC, the Corporation for Education Network Initiatives in California has some excellent resources, including a glossary of technology terms and a data performance table available in the resource section of their On the Road to Gigabit Broadband Self-Assessment Guide For Communities page at http://www.cenic.org/guide.*

Are high bandwidth services available to all businesses, organizations, and residents?

Does your community have affordable access to telecommunications services? Affordable access and high-speed access are often two different things. Both should be available in a community.

A. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

Broadband services and infrastructure factors to assess:	**yes**	**no**	**future actions**
Is the area served by a cellular phone provider?	☐	☐	
Is the area served by one or more national cellular phone providers?	☐	☐	
Is mobile digital wireless data service available? WIFI and WiMax are becoming increasingly available in communities.	☐	☐	
Is high-speed Internet access available in the community? Is cable modem service available? Is DSL available? Is fixed wireless data service available? Is ISDN available?	☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐	
Is there competition to provide high-bandwidth telecommunications services in the community?	☐	☐	
Are high-bandwidth telecommunications services available in the community at a price that is competitive with prices in other communities?	☐	☐	
Does the local telephone company or the cable company offer Voice over IP?	☐	☐	
There are varying levels of business infrastructure development that a community may have:			
▪ Is there at least one business development area that has infrastructure for high-bandwidth telecommunications?	☐	☐	
▪ Is there a backbone of high-bandwidth infrastructure that can be reached from many places in the community?	☐	☐	
▪ Is high-bandwidth telecommunications infrastructure readily available throughout the entire community?	☐	☐	
Do community leaders talk periodically with private infrastructure providers about plans and needs in serving the local community?	☐	☐	
Do community leaders publicly recognize local technology infrastructure providers and businesses which are bringing cutting edge information technologies to the community?	☐	☐	

Broadband services and infrastructure factors (continued):	yes	no	future actions
Has the community identified 20 biggest users of advanced telecommunications services?	☐	☐	
Has the community inventoried its telecommunications infrastructure assets?	☐	☐	
Has the community inventoried its aggregated demand for telecommunications services?	☐	☐	
Has the community projected the need for broadband services and infrastructure for the next 3 to 5 years? Some experts estimate that in 4 to 5 years, broadband with speeds of 25 to 40 megabits per second will be needed. DSL and cable modems typically provide 1-2 megabits per second.	☐	☐	
Do local governments use their purchasing power to support telecommunications services upgrades in the community?	☐	☐	
Has the community made site visits to "leading edge" communities in the deployment of broadband services and infrastructure?	☐	☐	
Are all new subdivision required to set aside proper telecom right of way?*[12]	☐	☐	
Are developers required to install telecom duct and turn it over to the community?*	☐	☐	
Are all new buildings required to have structured wiring meeting Cat5e/Cat 6 standards?*	☐	☐	
Does the community install duct and/or fiber just before repaving streets?*	☐	☐	
Are light poles with built in mounting brackets for wireless access points being installed when replacing streetlights or putting in new streetlights? The poles can be leased to private sector companies.*	☐	☐	
Do reasonable rights-of-way fees for all telecommunications providers and a simplified application process encourage competition?*	☐	☐	
Has the community invested in telecommunications infrastructure such as duct, fiber, or access points which can be leased to providers?*	☐	☐	
Are light poles with built in mounting brackets for wireless access points being installed when replacing streetlights or putting in new streetlights? The poles can be leased to private sector companies.*	☐	☐	

[12] Checklist items marked with * were drawn from "Telecommunications as Essential Public Infrastructre" by Andrew Cohilll available at http://www.designnine.com/library/docs/telecom_as_infrastructure.pdf.

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate your community's telecommunications infrastructure:[13]

1 56k dial-up and cellular phone services are available to all homes and businesses.

2 Some homes and business have cable modem, DSL or fixed wireless service available. Cellular phone services are available to all homes and businesses.

3 Many residences and business have cable modem, DSL or fixed wireless service available. Mobile digital wireless service is available in some locations.

4 All residences and businesses have cable modem, DSL or wireless service available. Mobile digital wireless service is available throughout the community. Satisfaction with broadband services is high.

What are our strengths in the area of telecommunications infrastructure?

What resources and assets are available in the community to address telecommunications infrastructure? What resources and assets are available regionally or in the state?

If you have a question about regulatory issues, contact the Nebraska Public Service Commission (www.psc.state.ne.us). If you have a question about the telephone industry, contact Roger Hahn at the Nebraska Information Network, (402) 434-2100 or e-mail NINroger@alltel.net.

[13] These assessment factors have been adapted from the *CSPP Readiness Guide* (http://www.cspp.org).

What are some ways in which telecommunications infrastructure could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?[14]

1 56k dial-up and cellular phone services are available to all homes and businesses.

2 Some homes and business have cable modem, DSL or fixed wireless service available. Cellular phone services are available to all homes and businesses.

3 Many residences and business have cable modem, DSL or fixed wireless service available. Mobile digital wireless service is available in some locations.

4 All residences and businesses have cable modem, DSL or wireless service available. Mobile digital wireless service is available throughout the community. Satisfaction with broadband services is high.

How would you prioritize telecommunications infrastructure development?

1 Low priority
2 Medium priority
3 High priority.
4 Highest priority

[14] These assessment factors have been adapted from the *CSPP Readiness Guide* (http://www.cspp.org).

Section IV: Technology Literacy and Access

Does your community have public access sites and free or affordable training on basic computer and Internet skills?

A. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

Public access and universal service factors to assess:	yes	no	future actions
Is there a place in the library, schools, or a community technology center where residents who do not own a personal computer can use one to do work and access the Internet?	☐	☐	
Are librarians continually trained to use information technology as a research tool?	☐	☐	
Does the public library offer free or low-cost training in the use of computer software and the Internet?	☐	☐	
Are adult education classes on common computer applications (using the Internet, word processing, spreadsheets, etc.) offered by the school system?	☐	☐	
Do students graduate from high school with basic computer skills on the most common computer applications (using the Internet, word processing, spreadsheets, etc.)?	☐	☐	
Is there a program to recycle older computers to loan or give to economically disadvantaged households?	☐	☐	
Is there a video-conferencing site for public and private sector use in the community or in the region?	☐	☐	
Is there a community accessible facility equipped for multimedia presentations for public and private use?	☐	☐	
Do most households have telephones?	☐	☐	
Are at least 75% of households online?	☐	☐	
Do at least 45% of Internet-connected homes have broadband access?	☐	☐	
Do at least 75% of adult Internet users find information, compare, and buy goods and services online?	☐	☐	
Are eligible entities (schools, libraries, and health care facilities) receiving support from the Universal Service Fund?	☐	☐	

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate your community's technology literacy and public access:

1 Less than 50% of households are online and public access to computers and the Internet is very limited.

2 Approximately 50% of households are online and public access to computers and the Internet is available in at least one location twenty or more hours a week.

3 75% of households are online and public access to computers and the Internet is available in at least one location at times convenient for most users.

4 Over 75% of households are online. Mobile access to the Internet through WIFI networks is available in several areas in the community.

What are our strengths in the area of technology literacy and public access?

What resources and assets are available in the community to address technology literacy and public access? What resources and assets are available regionally or in the state?

Nebraska resources include the Master Navigator program offered by the University of Nebraska Cooperative Extension's Connecting Nebraska Team (connecting.unl.edu). Community colleges also offer technology courses.

What are some ways in which technology literacy and public access could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?

1 Less than 50% of households are online and public access to computers and the Internet is very limited.

2 Approximately 50% of households are online and public access to computers and the Internet is available in at least one location twenty or more hours a week.

3 75% of households are online and public access to computers and the Internet is available in at least one location at times convenient for most users.

4 Over 75% of households are online. Mobile access to the Internet through WIFI networks is available in several areas in the community.

How would you prioritize technology literacy and public access development?

1 Low priority
2 Medium priority
3 High priority
4 Highest priority

Section V: Advanced Technology Training

Are there opportunities for advanced information technology training through local high schools, colleges and universities, or other institutions?

A. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

Technology training factors to assess:	yes	no	future actions
Are courses on common computer applications (i.e. Word processing, spreadsheets, databases) available?	☐	☐	
Are courses in Web site development available?	☐	☐	
Is a multi-course Web developer training program available?	☐	☐	
Are courses in database development available?	☐	☐	
Are courses in computer programming available?	☐	☐	
Are courses in network management available?	☐	☐	
Are continuing education programs available for information technology professionals?	☐	☐	
Are internships available for students studying information technology?	☐	☐	

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate your community's advanced technology training opportunities:

1 No advanced technology training opportunities are available in the community or area.

2 Some advanced technology training opportunities are available in the community or area.

3 Most advanced technology training needs can be met in the community or area.

4 All advanced technology training needs can be met in the community or area.

What are our strengths in the area of advanced technology training opportunities?

What resources and assets are available in the community to advanced technology training opportunities? What resources and assets are available regionally or in the state?

Community colleges, colleges and universities provide advanced technology training in many parts of the state.

What are some ways in which advanced technology training opportunities could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?

1 No advanced technology training opportunities are available in the community or area.

2 Some advanced technology training opportunities are available in the community or area.

3 Most advanced technology training needs can be met in the community or area.

4 All advanced technology training needs can be met in the community or area.

How would you prioritize advanced technology training opportunities development?

1 Low priority
2 Medium priority
3 High priority
4 Highest priority

Section VI: Community Services and Information

Are online community services and information--including government, schools, and libraries--available? In many communities, information technology may be an effective and efficient way to improve access to health care.

Community services and information is a very broad area and, accordingly, has been divided into six subsections:

- Public Library Services
- Health Care
- Education
- Local Government Services
- Criminal Justice, Law Enforcement and Emergency Services
- Non-profits, Arts, Culture, and History

Public Library Services

A. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

Public library factors to assess:	**yes**	**no**	**future actions**
Does the public library have an automated catalog and circulation system?	☐	☐	
Does the public library have online and/or CD-ROM reference tools available to its patrons?	☐	☐	
Is the public library networked with state and regional library systems?	☐	☐	
Is the public library networked with other local libraries to access holdings and other resources?	☐	☐	
Does the public library have a Web site to provide information and linkages to Internet resources?	☐	☐	
Can patrons search the library catalog and request renewals or inter-library loans from the library's Web site?	☐	☐	

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate your public libraries e-readiness:

1 The library catalog and circulation system is not automated and no public access terminals are available.

2 The library catalog and circulation system is automated and a few public access terminals are available.

3 The library catalog is available online. Sufficient public access terminals are available to meet public demand.

4 The library actively promotes information technology through classes and providing individual assistance. Technology is effectively used to make resources more accessible to patrons and to improve efficiency.

What are our strengths in the area of public library e-readiness?

What resources and assets are available in the community to address public library e-readiness? What resources and assets are available regionally or in the state?

The Nebraska Library Commission (www.nlc.state.ne.us) and the regional library systems (www.nlc.state.ne.us/system/) may be able to provide assistance.

Webjunction (www.webjunction.org) is a great resource on technology use in libraries.

What are some ways in which public library e-readiness could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?

1 The library catalog and circulation system is not automated and no public access terminals are available.

2 The library catalog and circulation system is automated and a few public access terminals are available.

3 The library catalog is available online. Sufficient public access terminals are available to meet public demand.

4 The library actively promotes information technology through classes and providing individual assistance. Technology is effectively used to make resources more accessible to patrons and to improve efficiency

How would you prioritize public library e-readiness?

1 Low priority
2 Medium priority
3 High priority
4 Highest priority

Education

A. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

Education factors to assess:	yes	no	future actions
Does the public school system have a technology plan?	☐	☐	
Is technology integrated throughout the K-12 curriculum? The International Society for Technology in Education (ISTE) has prepared suggested national technology standards which can serve as a guide (http://cnets.iste.org).	☐	☐	
Has the public school system devised a life cycle funding plan for technology incorporating total cost of ownership?			
Are teachers continually trained to use information technology as a teaching tool?	☐	☐	
Are administrators and support staff continually trained to use information technology as an administrative tool?	☐	☐	
Are students required to attain or demonstrate some level of technology proficiency at particular grade levels?	☐	☐	
Are computers, in laboratory or classroom settings, available for daily use by all students?	☐	☐	
Is the Internet available and used in the classroom as a teaching aid and not simply for browsing?	☐	☐	
Are school computers networked within and between schools in the local systems?	☐	☐	
Are youth involved in technology projects with target groups (i.e., senior citizens, businesses, etc.) within the community?	☐	☐	
Do schools have Web pages with information about programs, current events, student and teacher achievements, and PTA information?	☐	☐	
Do schools have interactive Web pages including access to homework assignments?	☐	☐	
Does the public school system utilize a Web-enabled student information system to display password-protected attendance and achievement?	☐	☐	
Are students, teachers, parents, and administrators using e-mail to communicate?	☐	☐	
Are two-way interactive distance learning and/or Web-based courses used to expand course offerings for students?	☐	☐	

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate education's e-readiness:[15]

1 Information technology is not integrated into the curriculum or the school's operations. 70% of classrooms have Internet connections with computers; 50% of teachers and administrators have e-mail accounts; pupil-to-multimedia/Internet-connected computer ratio is 7:1.

2 Information technology is beginning to be integrated into the curriculum and the school's operations. 80% of classrooms have Internet connections with computers; 100% of teachers and administrators have e-mail accounts. 50% of teachers have been trained to use the Internet for instruction; pupil-to-multimedia/Internet-connected computer ratio is 5:1.

3 Information technology is integrated into much of the curriculum and the school's operations. 90% of classrooms have Internet connections with computers; 100% of the teachers are trained to use the Internet for instruction; pupil-to-multimedia/Internet-connected computer ratio is 3:1.

4 Schools are highly networked environments; 100% of classrooms have Internet connections with computers. 100% of teachers are trained to use the Internet for instruction; pupil-to-multimedia/Internet-connected computer ratio is 1:1. All schools have an interactive Web site including access to homework assignments and e-mail contact with teachers and administrators.

What are our strengths in the area of education's e-readiness?

What resources and assets are available in the community to address education's e-readiness? What resources and assets are available regionally or in the state?

List of Nebraska distance learning resources:
http://www.nebraska.gov/education/html/2/37/60/index.phtml
Nebraska Rubric of Essential Technology Conditions for K-12 schools:
http://www.nde.state.ne.us/TECHCEN/downloads/NE%20RETC.pdf
Nebraska Student Essential Learnings in Technology:
http://www.nde.state.ne.us/TECHCEN/downloads/student_essential.pdf
North Central Regional Education Laboratory:
http://www.ncrel.org/

[15] These assessment factors have been adapted from the *CSPP Readiness Guide* (http://www.cspp.org).

What are some ways in which education's e-readiness could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?[16]

1 Information technology is not integrated into the curriculum or the school's operations. 70% of classrooms have Internet connections with computers; 50% of teachers and administrators have e-mail accounts; pupil-to-multimedia/Internet-connected computer ratio is 7:1.

2 Information technology is beginning to be integrated into the curriculum and the school's operations. 80% of classrooms have Internet connections with computers; 100% of teachers and administrators have e-mail accounts. 50% of teachers have been trained to use the Internet for instruction; pupil-to-multimedia/Internet-connected computer ratio is 5:1.

3 Information technology is integrated into much of the curriculum and the school's operations. 90% of classrooms have Internet connections with computers; 100% of the teachers are trained to use the Internet for instruction; pupil-to-multimedia/Internet-connected computer ratio is 3:1.

4 Schools are highly networked environments; 100% of classrooms have Internet connections with computers. 100% of teachers are trained to use the Internet for instruction; pupil-to-multimedia/Internet-connected computer ratio is 1:1. All schools have an interactive Web site including access to homework assignments and e-mail contact with teachers and administrators.

How would you prioritize education's e-readiness?

1 Low priority
2 Medium priority
3 High priority
4 Highest priority

[16] These assessment factors have been adapted from the *CSPP Readiness Guide* (http://www.cspp.org).

Health Care

A. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

Health care factors to assess:	yes	no	future actions
Do health care practitioners use interactive video for specialist consultation?	☐	☐	
Is interactive video available for emergency room consultation with primary care physicians?	☐	☐	
Is teleradiology technology available for rapid reading of X-rays by radiologists?	☐	☐	
Are home telehealth technologies used for home health care visits to elderly and disabled persons?	☐	☐	
Are medical records maintained in a digital format in a readily accessible database?	☐	☐	
Is interactive video used for in-service training of health care practitioners?	☐	☐	
Does a local computer network connect health care and medical service providers?	☐	☐	
Does the major health care facility in the community have a Web site?	☐	☐	
Does the major health care facility in the community have an interactive Web site?	☐	☐	
Do most health care providers have a Web site?	☐	☐	
Does a local health care provider provide a 24-hour “ask a nurse” service?	☐	☐	

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate health care's e-readiness:[17]

1 10% of providers have an informational Web site. 25% of providers have dial-up Internet access and e-mail accounts.

2 25% of providers have an informational Web site. 10% of providers store records electronically. 25% of providers have an always-on connection to the Internet. 50% of providers have e-mail accounts for external communication.

3 75% of providers have an informational Web site. 25% of providers have an interactive Web site. 50% of providers have an always-on connection to the Internet. 100% of providers have e-mail accounts for external communication.

4 Consultations are being performed using telehealth technologies. Providers have interactive Web sites and patient records are stored electronically. All health care providers have high-speed access for communication and telemedicine purposes.

What are our strengths in the area of health care's e-readiness?

What resources and assets are available in the community to address health care's e-readiness? What resources and assets are available regionally or in the state?

The Nebraska Hospital Association (www.nhanet.org) is working with the Nebraska Public Service Commission (www.psc.state.ne.us) to develop a plan to provide support for telehealth through the Nebraska Universal Service Fund.

[17] These assessment factors have been adapted from the *CSPP Readiness Guide* (http://www.cspp.org).

What are some ways in which health care's e-readiness could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?[18]

1 10% of providers have an informational Web site. 25% of providers have dial-up Internet access and e-mail accounts.

2 25% of providers have an informational Web site. 10% of providers store records electronically. 25% of providers have an always-on connection to the Internet. 50% of providers have e-mail accounts for external communication.

3 75% of providers have an informational Web site. 25% of providers have an interactive Web site. 50% of providers have an always-on connection to the Internet. 100% of providers have e-mail accounts for external communication.

4 Consultations are being performed using telehealth technologies. Providers have interactive Web sites and patient records are stored electronically. All health care providers have high-speed access for communication and telemedicine purposes.

How would you prioritize health care's e-readiness?

1 Low priority
2 Medium priority
3 High priority
4 Highest priority

[18] These assessment factors have been adapted from the *CSPP Readiness Guide* (http://www.cspp.org).

Local Government and Community Services

A. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

Local government and community services factors to assess:	yes	no	future actions
Do governments collaborate on telecommunications and information networking infrastructure?	☐	☐	
Are computers in local government networked within buildings and across jurisdictional lines?	☐	☐	
Do local governments use mobile wireless data networks (WIFI or WiMax) to enhance efficiency?	☐	☐	
Do local governments regularly include budgeted funding for technology upgrades and employee training?	☐	☐	
Does the city government have a Web site?	☐	☐	
▪ Are meeting agendas available online?	☐	☐	
▪ Are meeting minutes available online?	☐	☐	
▪ Are budget documents available online?	☐	☐	
▪ Are property tax appraisals available online?	☐	☐	
▪ Are ordinances available online?	☐	☐	
▪ Are land use and zoning maps available online?	☐	☐	
▪ Is information for new or prospective residents available online?	☐	☐	
▪ Are permits, forms, and applications available online?	☐	☐	
▪ Can citizens perform online information searches?	☐	☐	
▪ Can citizens complete online transactions?	☐	☐	
Does the county government have a Web site?	☐	☐	
▪ Are meeting agendas available online?	☐	☐	
▪ Are meeting minutes available online?	☐	☐	
▪ Are budget documents available online?	☐	☐	
▪ Are property tax appraisals available online?	☐	☐	
▪ Are ordinances available online?	☐	☐	
▪ Are land use and zoning maps available online?	☐	☐	
▪ Is information for new or prospective residents available online?	☐	☐	

Local government and community services factors (continued):	yes	no	future actions
▪ Are permits, forms, and applications available online?	☐	☐	
▪ Can citizens perform online information searches?	☐	☐	
▪ Can citizens complete online transactions?	☐	☐	
Do local governments use the Internet to post bids and buy goods or services?	☐	☐	
Do local officials play a role in state-level information networking policy formation?	☐	☐	
Have existing local ordinances been reviewed and modified to remove anti-technology bias?	☐	☐	
Do human service organizations have a centralized computer database of community resources?	☐	☐	
Do human service organizations communicate with the public and each other electronically?	☐	☐	
Does the community have a World Wide Web site for the community with links to other local home pages?	☐	☐	
Do community Web sites have information of specific interest to newcomers and visitors?	☐	☐	
Is there a community-maintained Web site for posting of community events and discussion of local issues?	☐	☐	
Do the city and county governments cooperate in a computerized geographic information system?	☐	☐	
Has there been an assessment of the overlapping data and/or mapping needs of local agencies such as the County Assessor, County Register of Deeds, city/county emergency response, city/county planning and zoning authorities, city/county public safety agencies, natural resources districts, local utilities and public works departments, economic development entities, and County Engineer/Highway Superintendent?	☐	☐	
Has there been an effort to determine what digital maps, geospatial data or technical assistance is available through state government agencies?	☐	☐	

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate local government's e-readiness:[19]

1 Local governments have informational Web sites.

2 The county and municipal government post meeting announcements and materials online. The Web site is updated regularly. 100% of employees have e-mail.

3 Citizens can make transactions via local government Web sites. Data is shared electronically between departments.

4 Governments use information technology to run operations more efficiently and to serve citizens 24 hours a day.

What are our strengths in the area of local government's e-readiness?

What resources and assets are available in the community to address local government's e-readiness? What resources and assets are available regionally or in the state?

The University of Nebraska Cooperative Extension's Connecting Nebraska Team offers an e-government training program (connecting.unl.edu). Nebraska Online will develop county Web sites free of charge (contact Dan Brown at danb@nol.org). The Nebraska GIS Steering Committee (www.calmit.unl.edu/gis/) has information on sharing data for GIS.

[19] These assessment factors have been adapted from the *CSPP Readiness Guide* (http://www.cspp.org).

What are some ways in which local government's e-readiness could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?[20]

1 Local governments have informational Web sites.

2 The county and municipal government post meeting announcements and materials online. The Web site is updated regularly. 100% of employees have e-mail.

3 Citizens can make transactions via local government Web sites. Data is shared electronically between departments.

4 Governments use information technology to run operations more efficiently and to serve citizens 24 hours a day.

How would you prioritize local government's e-readiness?

1 Low priority
2 Medium priority
3 High priority
4 Highest priority

[20] These assessment factors have been adapted from the *CSPP Readiness Guide* (http://www.cspp.org).

Criminal Justice, Law Enforcement, and Emergency Services

A. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

Criminal justice, law enforcement and emergency services factors to assess:	**yes**	**no**	**future actions**
Are all criminal justice agencies in your community organized and do they meet regularly?	☐	☐	
Can all offices in the criminal justice community exchange e-mail?	☐	☐	
Can all offices in the criminal justice community exchange documents electronically?	☐	☐	
Do all criminal justice agencies use information technology to maintain their records?	☐	☐	
Do all criminal justice agencies use common data tables?	☐	☐	
Do all criminal justice agencies have immediate electronic access to:			
▪ Local criminal justice records?	☐	☐	
▪ State criminal justice records?	☐	☐	
▪ Federal criminal justice records?	☐	☐	
Are communications systems of local criminal justice and emergency service providers compatible with the systems of other agencies?			
▪ Within the community?	☐	☐	
▪ Within the service area?	☐	☐	
▪ Within the county?	☐	☐	
▪ Within the state?	☐	☐	
Can all emergency services be dispatched and controlled from a single point?	☐	☐	
Do emergency service dispatch personnel collect, retain, maintain and access information about			
▪ Emergency procedures for hazardous waste or toxic materials?	☐	☐	
▪ Location of known hazardous waste or toxic material within their service area? ▪	☐	☐	
▪ Location of residences by road and/or telephone number?	☐	☐	
▪ Road closings or other barriers to emergency vehicle dispatch?	☐	☐	
Do all criminal justice agencies maintain continuing funding for technology support, systems enhancement or replacement, and training?	☐	☐	

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate the e-readiness of criminal justice, law enforcement and emergency services:

1 Law enforcement, criminal justice, and emergency services agencies are unable to exchange data electronically and cannot easily communicate with each other in emergency situations.

2 Data can be exchanged between some agencies and emergency communications between agencies is difficult.

3 Data can be exchanged among most agencies and emergency communications can be made among most agencies.

4 Law enforcement, criminal justice, and emergency services agencies exchange electronic data routinely and can easily communicate with each other in emergency situations.

What are our strengths in the area of criminal justice, law enforcement and emergency services?

What resources and assets are available in the community to address the readiness of criminal justice, law enforcement and emergency services? What resources and assets are available regionally or in the state?

What are some ways in which the e-readiness of criminal justice, law enforcement and emergency services could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?

1 Law enforcement, criminal justice, and emergency services agencies are unable to exchange data electronically and cannot easily communicate with each other in emergency situations

2 Data can be exchanged between some agencies and emergency communications between agencies is difficult.

3 Data can be exchanged among most agencies and emergency communications can be made among most agencies.

4 Law enforcement, criminal justice, and emergency services agencies exchange electronic data routinely and can easily communicate with each other in emergency situations.

How would you prioritize the e-readiness of criminal justice, law enforcement and emergency services?

1 Low priority
2 Medium priority
3 High priority
4 Highest priority

Non-profits, Arts, Culture and History

A. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

Non-profits, arts, culture, and history factors to assess:	yes	no	future actions
Do most local non-profits have Web sites?	☐	☐	
Do most local non-profits use e-mail to communicate with community members?	☐	☐	
Do local service organizations donate time to improve information technology in the schools, libraries, or community center?	☐	☐	
Do local service organizations renovate used computers for social service organizations or disadvantaged families?	☐	☐	
Is information available on the Internet or on a local network on the following components of the community:			
▪ Visual arts (galleries and exhibits, organizations, arts classes and instruction)?	☐	☐	
▪ Music (organizations, performance, classes and instruction)?	☐	☐	
▪ Theater (organizations, performances, training and instruction)?	☐	☐	
▪ Local events and festivals?	☐	☐	
▪ Local artists?	☐	☐	

B. This section should be initially completed by an individual or group of individuals designated by the information technology committee to be the section leader(s).

On a scale of 1 to 4, evaluate the e-readiness of non-profits, arts, culture, and history organizations:[21]

1 25% of non-profits and community-based organizations have informational Web sites and use e-mail.

2 50% of non-profits and community-based organizations have informational Web sites and use e-mail.

3 75% of non-profits and community-based organizations have informational Web site sand use e-mail. A unified portal provides access to a broad range of community information and services.

4 Community-based organizations and non-profits are actively using information technology to engage people in the community and make their services available.

What are our strengths in the area of non-profit and community-based e-readiness?

What resources and assets are available in the community to address the e-readiness of community-based and non-profits? What resources and assets are available regionally or in the state?

Techsoup has resources for non-profits (www.techsoup.org). Other resources may include the Nebraska Arts Council (http://www.nebraskaartscouncil.org/), the Nebraska Humanities Council (www.lincolnne.com/nonprofit/nhc) and the Nebraska State Historical Society (www.nebraskahistory.org/).

[21] These assessment factors have been adapted from the *CSPP Readiness Guide* (http://www.cspp.org).

What are some ways in which the e-readiness of community-based organizations and non-profits could be strengthened?

Does a more thorough assessment of this area need to be made? Yes No

C. These questions should be discussed and answered by the entire information technology committee or have community members provide input on these questions at a community forum.

In two to five years, how would you like your community to score in this area?[22]

1 25% of non-profits and community-based organizations have informational Web sites and use e-mail.

2 50% of non-profits and community-based organizations have informational Web sites and use e-mail.

3 75% of non-profits and community-based organizations have informational Web site sand use e-mail. A unified portal provides access to a broad range of community information and services.

4 Community-based organizations and non-profits are actively using information technology to engage people in the community and make their services available.

How would you prioritize the e-readiness or community-based organizations and non-profits?

1 Low priority
2 Medium priority
3 High priority
4 Highest priority

[22] These assessment factors have been adapted from the *CSPP Readiness Guide* (http://www.cspp.org).

Section VII: Social Capital (Optional)

Are there good lines of communication and good working relationships among community institutions and citizens? Information technology can be used to inform and involve citizens, building social capital. Communities in which institutions and citizens work well together are more successful in their development efforts.

Social capital is a term used to describe how well a community works together. Social capital and quality of life are important components in building Information Age communities. However, these two components are usually beyond the scope of most information technology committees. Yet, social capital and quality of life are too important to leave out altogether. As a compromise, a list of indicators of social capital and quality of life are included for general discussion purposes.

Social capital factors to assess:	**yes**	**no**	**future actions**
Is there a local newspaper that reports community issues fairly?	☐	☐	
Is there a financial institution that contributes to community projects by providing one or more of the following—commercial or low-interest loans; grants or donation or other inc-kind contributions; lending personnel to the effort; and/or providing marketing and technical assistance?	☐	☐	
Does your community have a community foundation?	☐	☐	
Does your community have linkages with other communities and organizations, including sending a delegation to another locality and/or participating in statewide or national competitions?	☐	☐	
Does your community share joint facilities (i.e., solid waste facility, hospital or industrial park) with other localities?	☐	☐	
Does your community participate in joint efforts with other localities on particular issues?	☐	☐	
Does your community participate in regional organizations?	☐	☐	
Does your community participate in state/national organizations (i.e., League of Nebraska Municipalities, Nebraska Association of Counties, National Association of Counties)	☐	☐	
Does your community have a leadership program?	☐	☐	
Do citizens actively participate in civic groups?	☐	☐	
Is information technology used to inform citizens, recruit volunteers, and solicit input from citizens?	☐	☐	

Many of these assessment items were drawn from "Community Connections News Release: How to Succeed at Economic Development" by Jan L. Flora and Jeff S. Sharp, Iowa State University Extension, May 2, 1997, available at http://www.extension.iastate.eud/communities/news/ComCon59.html .

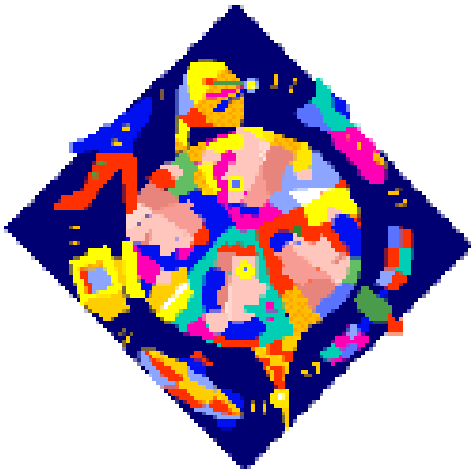
Section VIII: Quality of Life (Optional)

Does your community pay careful attention to quality of life issues? A high quality of life is essential to attract and retain IT workers and businesses.

Social capital and quality of life are important components in building Information Age communities. However, these two components are usually beyond the scope of most information technology committees. Yet, social capital and quality of life are too important to leave out altogether. As a compromise, a list of indicators of social capital and quality of life are included for general discussion purposes.

Quality of life factors to assess:	**yes**	**no**	**future actions**
Is your community visually attractive?	☐	☐	
Does your community have good schools?	☐	☐	
Does your community have access to health care?	☐	☐	
Are there ample cultural and recreational opportunities?	☐	☐	
Is the local economy healthy?	☐	☐	
Is the local environment clean?	☐	☐	
Is affordable housing available?	☐	☐	
Does the community have a variety of retail businesses?	☐	☐	
Is the community safe?	☐	☐	
Would a newcomer want to live in your community?	☐	☐	
Is the community easily accessible by car? Is air transportation available in the community or within a reasonable driving distance?	☐	☐	

Worksheets



Building Information Age Communities

Community Information Technology Planning
Workbook

Cooperatively developed by the
Nebraska Information Technology Commission
and the University of Nebraska's Technologies Across Nebraska Initiative

E-Readiness Assessment Summary Worksheet

Section	Strengths	Resources and Assets	Ways to Strengthen
Community Leadership **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			
Economic Development & E-Commerce **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			
Telecommunications Infrastructure **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			

Section	Strengths	Resources and Assets	Ways to Strengthen
Technology Literacy and Access **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			
Advanced Technology Training **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			
Public Library Services **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			
Health Care **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			

Section	Strengths	Resources and Assets	Ways to Strengthen
Education **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			
Local Government **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			
Criminal Justice, Law Enforce. & Emergency Services **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			
Non-Profits, Arts, Culture, and History **Current Level:** **Target Level:** **Priority Level:** **More info:** yes no			

Notes

Supplemental Assessment Activities
Planning Worksheet

Identify the e-readiness areas with the highest priority for your community. Indicate if more information is needed for each area. If more information is needed, briefly describe the information needed.

High Priority Areas	More info needed? Yes/No	Description of Information Needed

Based on your answers to the questions above, list the activities which will be undertaken to obtain additional information.

Activities Planned

1.

2.

Supplemental Assessment Activity

Complete this sheet for each supplemental assessment activity being planned.

Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Supplemental Activity

Complete this sheet for each supplemental assessment activity being planned.

Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Building Community Support
Planning Worksheet

Discussion Questions

- Should we host a community forum or town hall meeting to gather community input and to build support for the technology plan?
- If a community survey is being planned, should we include questions to gauge community support for technology-related development in general and possible activities (i.e., creating a community technology learning center or a technology incubator)?
- Should we present the assessment and the plan to the city council or county board?
- Should we present the assessment and the plan to community groups?
- Should we share the assessment and the plan with the local press?
- Are there other ways in which we could build community support?

Based on your answers to the questions above, list the activities which will be undertaken to build community support for the technology plan.

Activities Planned

1.

2

3.

4.

5.

Building Community Support Activity

Complete this sheet for each activity being planned to build community support.

Activity Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Building Community Support Activity

Complete this sheet for each activity being planned to build community support.

Activity Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Building Community Support Activity

Complete this sheet for each activity being planned to build community support.

Activity Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Building Community Support Activity

Complete this sheet for each activity being planned to build community support.

Activity Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Building Community Support Activity

Complete this sheet for each activity being planned to build community support.

Activity Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Technology Plan
Planning Worksheet

Identifying Priority Areas

Based on the Building Information Age Community Assessment completed by the technology committee, list 3-5 priority areas for your community.

1.

2.

3.

4.

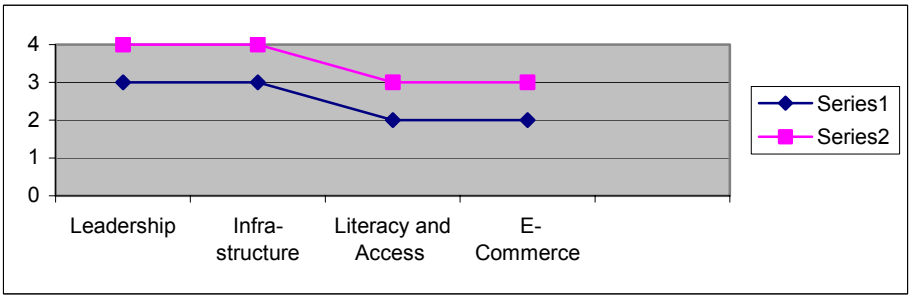
5.

A graph showing current and target levels of each priority can be useful. To make a graph set up an Excel spreadsheet like the one below.

	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5
Current Evaluation	3	2	3	1	3
Target Evaluation	4	3	4	2	4

You can use the graphing function to create a graph like this:

Current and Target Levels of E-readiness



Developing a Vision Statement

Describe a clear vision of what you would like your community to become in three to five years as a result of this technology plan. Include references to your community's priority areas. You may want to use the descriptions of your target e-readiness level for each priority area as a starting point for the vision statement.

Tip: Writing in groups is often difficult and cumbersome. Once you have identified key points that should be included in the vision statement, it may be best to identify a volunteer or a small group of volunteers to draft a vision statement and present it to the group.

Key points

General:

Priority 1:

Priority 2:

Priority 3:

Priority 4:

Priority 5:

Vision Statement

Priority Area and Action Plan Development

Priority Area 1:

Current E-Readiness Level:

Target E-Readiness Level:

Strengths:

Resources and Assets:

Action Plan (List 1-5 activities to address this priority area.)

1.

2.

3.

4.

5.

Priority Area and Action Plan Development

Priority Area 2:

Current E-Readiness Level:

Strengths:

Resources and Assets:

Target E-Readiness Level:

Action Plan (List 1-5 activities to address this priority area.)

1.

2.

3.

4.

5.

Priority Area and Action Plan Development

Priority Area 3:

Current E-Readiness Level:

Strengths:

Resources and Assets:

Target E-Readiness Level:

Action Plan (List 1-5 activities to address this priority area.)

1.

2.

3.

4.

5.

Priority Area and Action Plan Development

Priority Area 4:

Current E-Readiness Level:

Strengths:

Resources and Assets:

Target E-Readiness Level:

Action Plan (List 1-5 activities to address this priority area.)

1.

2.

3.

4.

5.

Priority Area and Action Plan Development

Priority Area 5:

Current E-Readiness Level:

Strengths:

Resources and Assets:

Target E-Readiness Level:

Action Plan (List 1-5 activities to address this priority area.)

1.

2.

3.

4.

5.

Implementation
Planning Worksheet

Once your community has prepared a technology plan, it's time to focus efforts on implementation. Building community support is a key component in the successful implementation of a plan. Review the complete Building Community Support Planning Worksheet and discuss any modifications or additions that should be made to the plan.

The technology committee should also development a plan to implement the activities listed in the technology plan. The technology committee should select 2 to 5 activities listed in the technology plan which will be undertaken first. Try to be realistic in determining the number of activities that can be undertaken. It is a good idea to choose both relatively easy activities which can be accomplished in less than a year and more challenging long-term activities which will take more than a year to complete. The implementation plan should be updated annually.

List the short-term activities and the long-term activities which will be undertaken this year.

Short Term Activities

1.

2.

3.

Long Term Activities

1.

2.

3.

Implementation Activity

Complete this sheet for each action item being implemented.

Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Implementation Activity

Complete this sheet for each action item being implemented.

Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Implementation Activity

Complete this sheet for each action item being implemented.

Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Implementation Activity

Complete this sheet for each action item being implemented.

Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Implementation Activity

Complete this sheet for each action item being implemented.

Description:

Steps Needed to Accomplish This Activity

1.

2.

3.

4.

5.

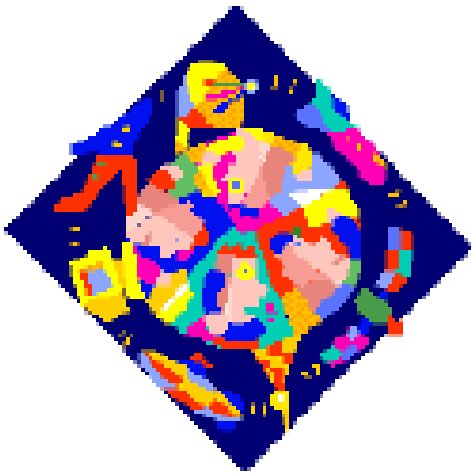
Time Frame
Start Date: **End Date:**

Sponsor/Project Leader:

Estimated Cost:

Funding Source(s):

Sample Plans



Building Information Age Communities

Community Information Technology Planning
Workbook

Cooperatively developed by the
Nebraska Information Technology Commission
and the University of Nebraska's Technologies Across Nebraska Initiative

Sample

Information Technology Assessment and Plan

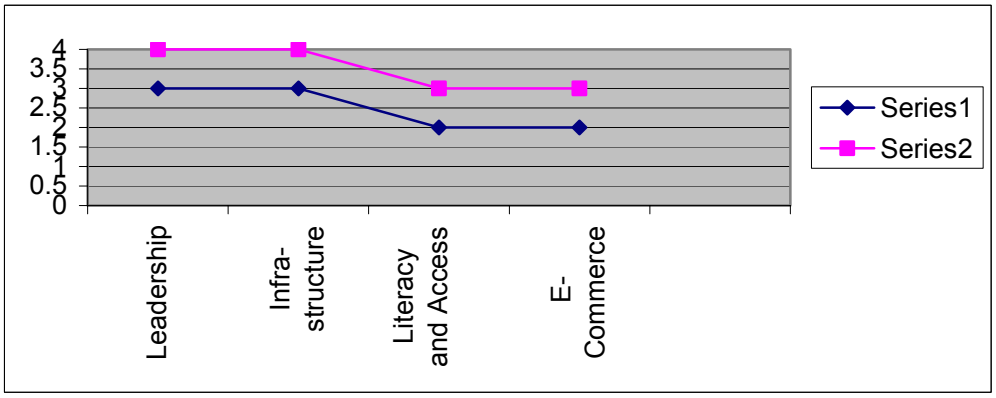
Our Community, Nebraska

2002

Our Community determined that our four priority areas are community leadership, telecommunications infrastructure; technology literacy and access; economic development and e-commerce. For each of these areas, Our Community's present level of e-readiness has been determined and a target level of e-readiness has been set. Each area was evaluated using a four-point scale, with level four being the highest level of e-readiness. For each area, an action plan has been developed to reach our target level of e-readiness.

The following chart illustrates Our Community's current and target levels of e-readiness:

Current and Target Levels of E-Readiness



Community Leadership

Community leadership is a vital component of community and economic development efforts. Efforts should be made to continue to strengthen this area. The information technology committee used the following scale to evaluate community leadership:

1	Many business and community leaders do not understand the importance of information technology. There is little community support for IT-related development.
2	Some business and community leaders understand the importance of information technology, but information technology development is not being addressed by the community or region. There is some community support for IT-related development.
3	Many business and community leaders understand the importance of information technology and there are efforts to cooperatively address information technology development. There is moderate community support for IT-related development.
4	All key community and business leaders understand the importance of information technology and are working cooperatively to address information technology development. There is widespread community support for IT-related development.

Current E-Readiness Level
On a scale of 1 to 4, Our Community is at level 3 in the area of community leadership. While many businesses and community leaders understand the importance of information technology development, the community as a whole has not worked together to address information technology development.

Strengths
Our Community has a strong history of working together. There is strong community support for economic development initiatives.

Resources and Assets:
Our Community has an existing leadership development program.

Target E-Readiness Level
In two to five years, our goal is to be at level 4.

Action Plan
1. The information technology taskforce which developed this plan will become an ongoing committee and will provide leadership in implementing the plan.

2. IT professionals will be encouraged to participate in the leadership development program and take a more active role in the IT committee and other development efforts.

3. Community leaders and interested community members will be invited to an IT tour to see firsthand how IT is being used by local businesses, the school, and the hospital.

Telecommunications Infrastructure

Telecommunications infrastructure is becoming increasingly important for both small and large businesses, education, health care and government services. The information technology committee used the following scale to evaluate telecommunications infrastructure:

1	Cable modem, DSL or wireless services are not available in the community.
2	Some homes and business have cable modem, DSL or wireless service available.
3	Many residences and business have cable modem, DSL or wireless service available.
4	All residences and businesses have cable modem, DSL or wireless service available. Satisfaction with broadband services is high.

Current E-Readiness Level
On a scale of 1 to 4, Our Community is at level 3 in the area of telecommunications infrastructure. Within the past year, the availability of broadband services within the county has greatly improved. However, for rural residents of the county, broadband access remains problematic.

Strengths
There are a number of providers within the county. Our Community has a number of large businesses which are heavy users of telecommunications services.

Resources and Assets
Strong demand for broadband services exists in the local community and in rural areas of the county.

Target E-Readiness Level
In two to five years, our goal is to be at level 4.

Action Plan
1. Demand for broadband services in rural areas of the county will be documented. With this information, the information technology committee will contact wireless Internet service providers about providing service in rural areas of the county.

Technology Literacy and Access

In order to realize the benefits of the Information Age, community members must have access to information technology and must know how to use it. The information technology committee used the following scale to evaluate technology literacy and access:

1	Less than 50% of households are online and public access to computers and the Internet is very limited.
2	Approximately 50% of households are online and public access to computers and the Internet is available in at least one location twenty or more hours a week.
3	Over 50% of households are online and public access to computers and the Internet is available in at least one location at times convenient for most users.
4	At least 75% of households are online and at least 75% of adults are Internet users. Mobile access to the Internet through WIFI networks is available in several areas in the community.

Current E-Readiness Level
On a scale of 1 to 4, Our Community is at level 2 in the area of technology literacy and access. The library has two terminals available for public access and is open 20 hours a week. The committee estimates that approximately 50 of households are online.

Strengths
The high school has a strong technology program. All graduates are proficient in the use of the Internet and common computer applications.

Resources and Assets
The school computer lab could be used for computer and Internet classes. The senior center is interested in providing public access terminals and hosting computer classes. The University of Nebraska Extension program offers the Master Navigator Internet training program.

Target E-Readiness Level
In two to five years, our goal is to be at level 3.

Action Plan
1. Coordinate a teleliteracy drive to get at least 100 community members to take an Internet or computer class.

2. Work with the library board to plan a fundraiser to purchase two additional public access computers.

3. Work with the senior center to offer computer and Internet classes there once a month.

4. Work with the community college to offer advanced computer classes at the high school.

5. Partner with other communities in the region to create a regional technology learning center.

Economic Development and E-Commerce

Communities are finding that adequate telecommunications infrastructure is necessary to recruit new businesses and to retain existing businesses. Information technology can also help local businesses expand markets, reduce costs, and improve customer service. The information technology committee used the following scale to evaluate economic development and e-commerce.

1	Economic development efforts do not address Information Age businesses. Few local businesses are using information technology to improve productivity and expand markets.
2	There is some recognition in the community that information technology is an economic development tool. Some local businesses are using information technology effectively to improve productivity and expand markets.
3	Economic development efforts are beginning to target Information Age businesses. Most small businesses are using information technology effectively to improve productivity and expand markets. At least 50% of businesses have a Web site and 85% of businesses are online.
4	Economic development efforts are tied to the needs of Information Age businesses. Nearly all small businesses have integrated information technology into their business processes and plans.

Current E-Readiness Level
On a scale of 1 to 4, Our Community is at level 2 in the area of economic development and e-commerce. Several businesses are using information to improve productivity and expand markets. However, far fewer than 85% of businesses are online.

Strengths
Our community has a strong chamber of commerce and has just hired an economic development director. The local telephone company is willing to work with new and existing businesses to meet their telecommunications needs.

Resources and Assets
The University of Nebraska Extension program offers the Nebraska Electronic Main Street program and the EDGE training program for entrepreneurs. The local community college offers courses in e-commerce. The high school FBLA leader has expressed an interest in pairing students with local businesses in an e-commerce project.

Target E-Readiness Level
In two to five years, our goal is to be at level 3.

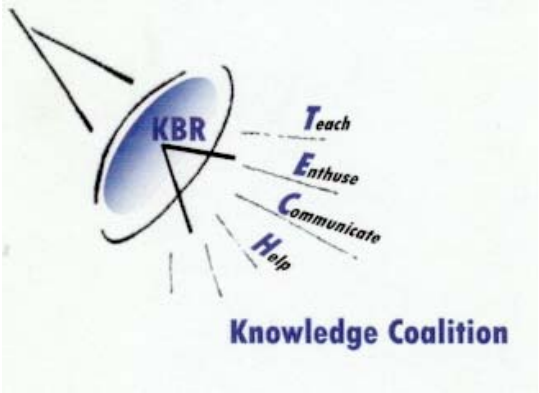
Action Plan
1. Survey local businesses including home-based businesses to determine their current usage of information technology and to ascertain their training needs.

2. Work with the Chamber of Commerce to offer a business after hours event focusing on the use of information technology in local businesses.

3. Work with the University of Nebraska Extension, the local community college, and the high school to offer e-commerce and information technology training as determined by the business survey.

4. Explore the development of a technology business incubator.

KBR TechKnowledge Coalition



2003 Information Technology Assessment and Plan

KBR Region, Nebraska

Keya Paha, Brown and Rock Counties

Mission Statement

"To provide opportunities to pursue lifelong learning and cultural and economic enrichment through increased access and application of the latest information technology for citizens in each community."

Patty Barstow, Facilitator
335 N. Main St., Ainsworth, NE 69210
402-387-2740
ncdc@ainsworthlinks.com

Carol Plate, Fiscal Agent
148 W 4th St, Ainsworth, NE 69210
402-387-2213 cplate1@unl.edu

Committee members: Brown County: Todd Anderson, Gail Irwin, Richard Albrecht, Betty Shelton, Sue Brown; Rock County: Chris Nielsen, Linda May, Evelyn Ost, Dave Jacobs, Sheila Chance, Stacie Knox; Keya Paha County: Jim Ripley, Patsy Cook, Judy Cronk, Sue Weston, Ron Heerten

KBR TechKnowledge Coalition

2003
Information Technology Assessment and Plan

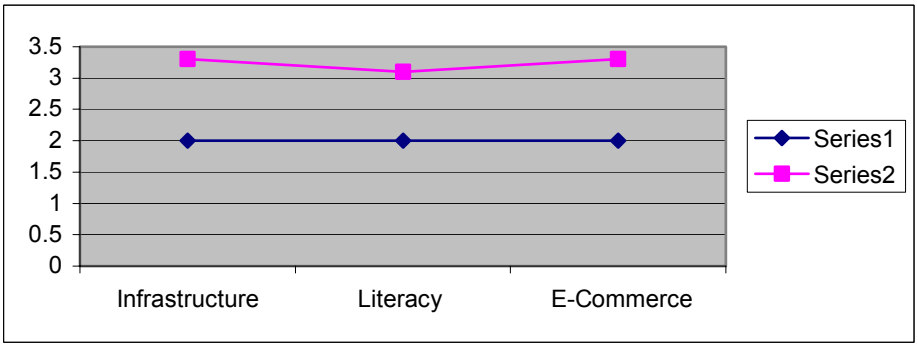
KBR Region, Nebraska
Keya Paha, Brown and Rock Counties

The KBR TechKnowledge Coalition Technology Plan is a single plan developed for three counties. The information technology committee assessed the three counties as one unit to determine the current level of e-readiness (blue line). Then the committee focused on each individual county to select the target level of e-readiness and set the priorities.

The survey results as well as the community forums reflected many similarities from community to community within the region. However, target levels selected by the public varied slightly so the committee averaged the selected levels to set the target level for the plan (pink line).

The committee selected three priority areas for the technology plan based on public input. These areas are: 1) Telecommunication Infrastructure, 2) Technology Literacy and Access and (3) Economic Development and E-Commerce.

Current and Target Levels of E-Readiness



Telecommunications Infrastructure

Infrastructure is the basis to all communication. Getting quality infrastructure to the rural communities of Nebraska is a constant challenge. Recognizing that many of the residents in the KBR region do not live within city or village limits, it is difficult to put all citizens in a single category.

The information technology committee used the following scale to evaluate telecommunications infrastructure.

1	Cable modem, DSL or wireless services are not available in the community.
2	Some homes and businesses have cable modem, DSL or wireless service available.
3	Many residences and businesses have cable modem, DSL or wireless service available.
4	All residences and businesses have cable modem, DSL or wireless service available. Satisfaction with broadband services is high.

Current E-Readiness Level
On a scale of 1 to 4, our region is a level 2 in telecommunication infrastructure. There are eleven separate telephone exchanges in the three county region. The Information Technology Committee sites this as an obstacle for efficient infrastructure. Also, many households within these counties are located in sparsely populated areas up to 65 miles from an incorporated town. Therefore, it is difficult for telecommunication providers to justify the expense of connecting those households. There is unused bandwidth laid along the highways to these households, which could potentially provide access.

Of the surveys returned, 87% of the households in our region utilize a dial-up connection to the Internet. 79% indicate a desire for faster Internet connection. 54% of those indicate faster service is not available while 48% do not know if it's available.

Strengths
The small, locally owned providers have upgraded their telecommunication equipment and several of our communities receive affordable, high-speed Internet. Also provided is affordable cellular service, however, there are areas of dead space.

The three secondary schools in the region have high-speed access through a T1 line with service provided through the local Education Service Unit #17, which demonstrates efforts being made to share services regionally.

Resources and Assets
Current telecommunication companies, ESU #17, KBR Rural Public Power and the two area hospitals have committed resources to meet the needs of area residents. All local governments are on-line and endorse technology as a communication link to bridge the miles to our region.

Target E-Readiness Level
In two to five years our average regional goal is to be at level 3.3.

Action Plan
1. Use current data to inform providers of concerns on the following issues:
   - High Internet traffic during peak times of the day limits access. Busy signals are often received when attempting to go on-line.
   - Affordable high-speed Internet is not available in many areas of our region, especially outside city/village boundaries.

2. Create a directory of Internet Service Providers that lists services and cost, contact numbers, number of servers/modems so individuals can make an educated decision on selecting a provider.

3. Continue dialogue with Congressman Osborne's office concerning:
   - Access to dark fiber along highways.
   - Encourage cellular providers to share resources.
   - Connect Distance Learning pods to make classes/meetings accessible statewide.

4. Encourage cellular providers to provide more coverage by sighting these safety issues:
   - Emergency pagers are unreliable because of dead space.
   - Many of our students drive several miles to school because there is no bus service.
   - Local residents and tourists who depend on cell service may not have accessibility in an emergency situation.

Technology Literacy and Access

Technology cannot be utilized to its potential without a clear understanding of how to use it and the availability of equipment.

The information technology committee used the following scale to evaluate technology literacy and access.

1	Less than 50% of households are online and public access to computers and the Internet is very limited.
2	Approximately 50% of households are online and public access to computers and the Internet is available in at least one location twenty or more hours a week.
3	Over 50% of households are online and public access to computers and the Internet is available in at least one location at times convenient for most users.
4	At least 75% of households are online and at least 75% of adults are Internet users. Mobile access to the Internet through WIFI networks is available in several areas in the community.

Current E-Readiness Level
On a scale of 1 to 4, our region is a level 2 in technology literacy and access. 65% of the returned surveys indicated having a computer in the household. 87% (the largest group) indicate using it for Internet and E-mail. 65% indicate using the Internet daily. Only 13% of our returned surveys indicated usage of public access computers. Only 6% indicate using public access computers at public libraries. The IT committee recognizes there is a margin of error produced by the survey results. The committee believes this response could indicate most computer owners submitted completed surveys. According to the librarians on the tech committee, the public access computers are in use and have a waiting line during peak hours. This would indicate a need for more computers as well as extended hours that are convenient for users.

Security/Privacy/Identification theft was the number one technology related concern indicated on the returned surveys.

Strengths
The school systems in the three counties have strong technology programs. Northeast Community College works with the three counties to provide adult education classes in our schools and libraries or other facilities that can provide adequate room. Some local providers will make special accommodations to assist in conducting a class.

Resources and Assets
The publicly funded offices in our region cooperate by providing room and equipment for continuing education. These include, but are not limited to, schools, Educational Service Unit #17, North Central Nebraska RC&D, North Central Development Center, hospitals, libraries and the extension office.

50% of the responses on the survey stated not having computer classes in elementary, high school or college and only 27% have taken computer classes offered locally through continuing education. The survey does indicate a desire for advanced technology training indicating those that have computer skills would like to continue training. 53% of respondents indicated a desire to know more about opportunities through technology.

Target E-Readiness Level
In two to five years our average regional goal is to be at level 3.1.

Action Plan
1. Create a directory of personnel to provide services and repair/training and resources. It will also include technology terminology, public library hours and available classes.

2. Coordinate classes that provide continuing education for local technology personnel and suppliers.

3. Develop and maintain website for technology plan that includes resource links.

Economic Development and E-Commerce

Businesses must endorse technology as a tool to keep our rural area in the competitive market. Our region recognizes technology as an opportunity for entrepreneurs.

The information technology committee used the following scale to evaluate technology literacy and access.

1	Economic development efforts do not address Information Age businesses.
2	There is some recognition in the community that information technology is an economic development tool. Some local businesses are using information technology effectively to improve productivity and expand markets.
3	Economic development efforts are beginning to target Information Age businesses. Most small businesses are using information technology effectively to improve productivity and expand markets. At least 50% of businesses have a Web site and 85% of businesses are online.
4	Economic development efforts are tied to the needs of Information Age businesses. Nearly all small businesses have integrated information technology into their business processes and plans.

Current E-Readiness Level
On a scale of 1 to 4, our region is a level 2 in economic development and E-Commerce. Of the surveys returned, 28% of business owners do not have a computer in their business and only 84% of the businesses that have a computer use it for recording keeping. 20% of business owners indicate they currently have a website. Of the remaining businesses that responded only 45% indicated a desire to have a website.

Strengths
There is a general knowledge that technology is a means to economic stability. 84% of returned surveys indicate technology is vital or very important to the future of our region. Congressman Osborne and economic development groups continue to address the need for affordable, high-speed access to provide opportunities to rural residents. Current information provided through Web sites welcomes visitors and highlights our quality-of-life encouraging relocation to our region.

Resources and Assets
Congress Osborne's E-Commerce Workshop provides virtual examples of technology being integrated into businesses and governmental services. USDA Title VI provides funds to develop broadband services in areas that have no access to high-speed Internet. Locally owned businesses that are directly connected to the community feel the effects of economic development and therefore recognize its importance.

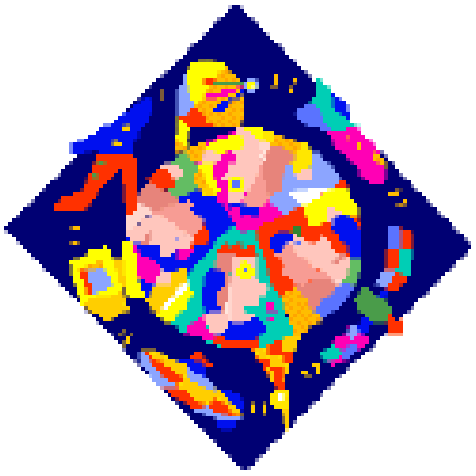
Target E-Readiness Level
In two to five years our average regional goal is to be at level 3.3.

Action Plan
1. Survey businesses, through the chamber newsletter, to ascertain information technology needs.

2. Educate businesses on the benefits technology can provide and inform businesses about the technology plan by attending chamber meetings and writing articles for the chamber newsletter.

3. Conduct IT opportunities/training targeted by category to business owners, i.e. livestock/ag, retail, services, etc.

Additional Resources



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Additional Resources

Other Resources from Technologies Across Nebraska

IT Planning and Mini Grant Program www.nitc.state.ne.us/toolkit/pilot/
Surveys, reports, and information on the activities of community and regional technology committees participating in the program are available.

Community Information Technology Toolkit www.nitc.state.ne.us/toolkit
The toolkit contains resources, success stories, and frequently asked questions related to information technology development.

Technologies Across Nebraska technologiesacrossnebraska.unl.edu
The Technologies Across Nebraska Site includes information on the Technologies Across Nebraska partnership, a calendar of events, information on workshops and classes, and a listing of resources.

Additional Community Technology Plans

Aurora, Nebraska
Aurora, Nebraska is recognized as a leader in technology-related development. Local officials credit much of their success to the development of a technology plan. The Hamilton County strategic technology plan from 1999 is available at www.nitc.state.ne.us/itc/community/HamiltonCountyPlan2.pdf .

Blacksburg, Virginia
Blacksburg, Virginia is the most wired community in the United States. Their technology plan is available at www.blacksburg.gov/downloads/Information_Technology.pdf .

Lincoln, Nebraska
Lincoln, Nebraska hired HDR to conduct a technology assessment and to develop a technology plan. Their plan is available at http://www.ci.lincoln.ne.us/city/mayor/tech/pdf/techrprt.pdf .

Other Resources

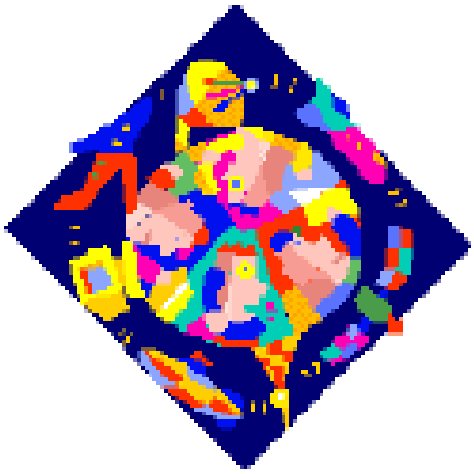
Design Nine http://www.designnine.com/
Design Nine is a consulting firm operated by Andrew Michael Cohill, who directed the Blacksburg Electronic Village. The library section contains a number of fascinating articles on building telecommunications infrastructure in communities and promoting the effective use of technology.

CSPP www.cspp.org
CSPP's Readiness Guide is the most widely used e-readiness assessment. It was developed for metropolitan areas and can be a bit daunting for very small communities.

CENIC www.cenic.org

CENIC has developed a self-assessment guide for communities. *On the Road to Gigabit Broadband* is an excellent resource, adapted from *CSPP's Readiness Guide*. The Web site also contains a data performance comparison table and a glossary of terms.

Credits



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Credits

The *Building Information Age Communities Community Information Technology Planning Workbook* was developed by Anne Byers, Community IT Manager for the Nebraska Information Technology Commission, with input from members of the Community IT Toolkit Committee, the Nebraska Information Technology Commission's Community Council and Technologies Across Nebraska. This assessment tool and additional resources are available from the Community Information Technology Toolkit available at http://www.nitc.state.ne.us/toolkit. The workbook was pilot tested by members of eight community and regional technology committees participating in the 2002-2003 IT Planning and Mini Grant program.

Thank you to the technology committees of Alliance; Brown, Keya Paha, and Rock Counties; Custer County; Crawford-Harrison; Edgar: Fillmore County; West Point area; and York County. The suggestions of the committee members and the lessons learned were invaluable in the development of this revised version of the workbook. Patty Barstow, who facilitated the Brown, Keya Paha, and Rock Counties technology committee, contributed some tips on working with multi-community groups. Members of the University of Nebraska Cooperative Extension's Connecting Nebraska Team and other Extension Educators in these communities also provided valuable assistance.

This assessment draws upon the work of many individuals and organizations. The nine questions which establish the framework of this assessment were drawn from "Building eCommunities: Getting Everyone Connected" by Andrew Michael Cohill (available at http://www.designnine.com/library/docs/ecommunities.pdf). In addition some of the indicators in the telecommunications infrastructure section were drawn from his article "Telecommunications as Essential Public Infrastructure" (available at www.designnine.com/library/docs/telecom_as_infrastructure.pdf)

Many of the indicators in this assessment were adapted from the "Report Card for the Information Age" developed by the Docking Institute for Public Affairs at Fort Hays State University in Hays, Kansas. We are grateful for the use of the instrument and for all of the work they have done in helping communities utilize information technology as a community and economic development tool. For more information on the Docking Institute, see http://www.fhsu.edu/docking .

The questions which assess a community's overall e-readiness in each category were modeled after the CSSP Readiness Guide (http://www.cspp.org). Some of the questions were adapted from the Readiness Guide.

Many of the social capital indicators were drawn from "Community Connections News Release: How to Succeed at Economic Development" by Jan L. Flora and Jeff S. Sharp, Iowa State University Extension, May 2, 1997, available at http://www.extension.iastate.edu/communities/news/ComCon59.html .

The workbook also includes contributions from Nebraskans who have been involved in technology-related development. Roger Hahn, Nebraska Information Network, provided assistance in the development of the telecommunications glossary. Christine Angerame, Aurora Technology Center Coordinator, provided updated information on the Aurora Technology Center.